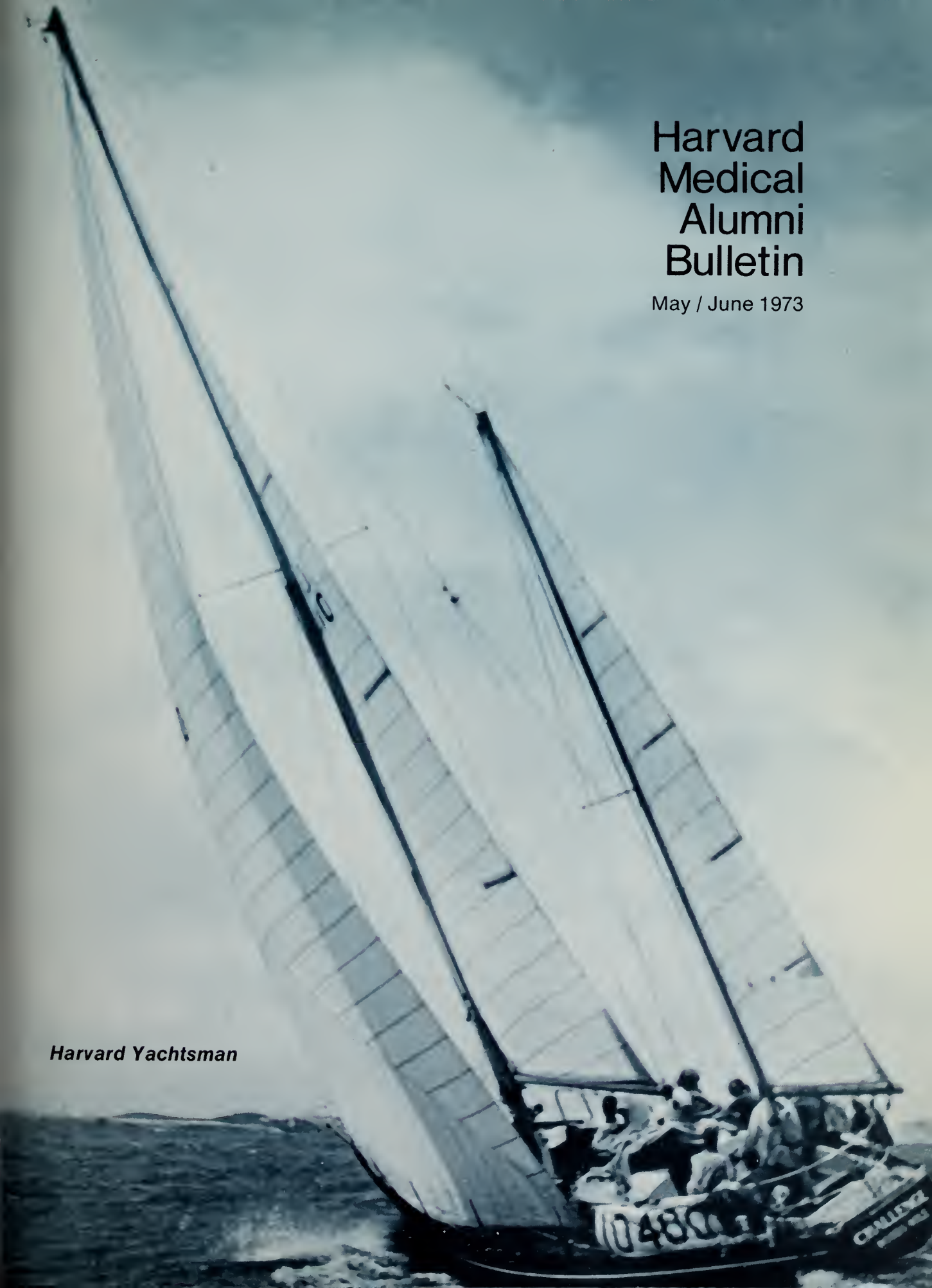


Harvard Medical Alumni Bulletin

May / June 1973

Harvard Yachtsman





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of the editorial staff.

When cardiac complaints occur in the absence of organic findings, underlying anxiety may be one factor



The influence of anxiety on heart function

Excessive anxiety is one of a combination of factors that may trigger a series of maladaptive functional reactions which can generate further anxiety. Often involved in this vicious circle are some cardiac arrhythmias, paroxysmal supraventricular tachycardia and premature systoles. When these symptoms resemble those associated with actual organic disease, the overanxious patient needs reassurance that they have no

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions

organic basis and that reduction of excessive anxiety and emotional overreaction would be medically beneficial.

The benefits of antianxiety therapy

Antianxiety medication, when used to complement counseling and reassurance, should be both effective and comparatively free from undesirable side effects. More than 13 years of extensive clinical experience has demonstrated that Librium (chlordiazepoxide HCl) fulfills these requirements with a high degree of consistency. Because of its wide margin of safety, Librium may generally be administered for extended periods, at the physician's discretion, without diminution of effect or need for increase in dosage. (See summary of prescribing information.) If cardiovascular drugs are necessary, Librium is used concomitantly whenever anxiety is a clinically significant factor. (See Precautions.) Librium should be discontinued when anxiety has been reduced to appropriate levels.

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in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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Overview

Goldfinger Directs Continuing Education

Stephen E. Goldfinger, M.D., has been named associate dean for continuing education at HMS. Since 1968, Dr. Goldfinger has been responsible for the development of community hospital educational programs in the Greater Boston area as assistant dean of community programs in the department of continuing education, and will continue to head this program. He also serves as the Tri-State Regional Medical Program Coordinator for Harvard.

The department of continuing education (formerly known as Courses for Graduates) currently offers some 44 courses in a variety of clinical disciplines to physicians from each of the 50 states and many foreign countries. During the academic year 1971-72, 2947 physicians were enrolled. All courses are offered at teaching hospitals associated with the Medical School.

The appointment of Dr. Goldfinger follows the recent resignation of Daniel D. Federman '53 as associate dean. Dr. Federman is now chairman of the department of medicine at Stanford University Medical Center.

Dr. Goldfinger, who is also associate professor of medicine at the Massachusetts General Hospital, received the A.B. degree in 1956 from Princeton, and the M.D. degree in 1960 from Columbia University College of Physicians and Surgeons. He is a fellow of the American Board of Internal Medicine.

UNC Names Building for HMS Alumnus

On March 22, 1973, Walter Reece Berryhill '27 was honored by the University of North Carolina School of Medicine when a new \$6 million Basic Medical Science Building at Chapel Hill was dedicated in his name. The principal speaker at the ceremony was another HMS graduate and former student of Dr. Berryhill's, Erle E. Peacock '49, professor and chairman of the department of surgery at the University of Arizona Medical School.

Speaking with praise of Dr. Berryhill to 650 people at the ceremony, the present dean of the University of North Carolina, Christopher C. Fordham III '51, seemed to epitomize the feelings of many of his colleagues with the following words:

Dr. Berryhill's achievements and contributions to the citizens of North Carolina through his efforts at the University are so impressive and of such durability that I would like to make my comment on this occasion a very personal one. My own personal debt to Dr. Berryhill,

and affection and respect for him . . . are very important to me, and I know that this feeling is shared by so many doctors and patients across the state of North Carolina and elsewhere.

His long list of accomplishments at the University of North Carolina toward the development and structure of the Medical School, as well as in the medical field, certainly deserve attention here. But the spotlight should primarily shine on the man behind those achievements — the power behind the action, the spirit and character behind the ideas toward which he worked.

Dr. Berryhill grew up in the small community of Steele Creek, near Charlotte, in a warm but staunchly Calvinistic family. His decision to go to UNC at Chapel Hill was one of the most significant he ever made. It was there that he decided on medicine as a career rather than the ministry; it was there that he learned the discipline of learning that would later elevate him to the position of dean at the same school he entered as a "country boy" undergraduate in 1917.

The first manifestations of his high principles and love of learning came when he and his bride (the former Miss Norma Connell) moved to Cleveland in 1930. There he served as chief resident of medicine at Lakeside Hospital and dean of the University there. While in Cleveland, he developed an unusually strong sense of responsibility, and it was there that he began to set a pattern which would distinguish him throughout his life. He was never as concerned about being the best as he was about getting the best for the school.

When he returned to Chapel Hill in 1933, he directed the Student Health Service, supervised the teaching of a course in physical diagnosis to second-year students, and maintained his own practice.

He was fascinated with the interrelation of hospital and medical school. His opinions about what made a good teacher and dean were strong, and he soon became aware that the two-year medical school was growing less and less popular with doctors and educators.

Dr. Berryhill is credited with being the one who ultimately put his ideals into practice and found the way to gain acceptance for a four-year medical program at the University of North Carolina. Primarily depending on dedicated alumni for work and funds, he successfully convinced the people of North Carolina that the state did indeed need another four-year medical school. Duke University did not have a primary obligation to the people of the state; the University of North Carolina would.

Recruiting people to develop the clinical departments for teaching students and staffing the hospital was the next problem. Money, however necessary, does not mean that there is a school but only that there is a place for one. Those chosen came from a wide variety of prestigious schools all over the country — Harvard, Yale, Columbia, Jefferson, Penn, Duke, and Washington. Dr. Womack, the first chairman of the department of surgery, recalls the early years of the four-year program:

When we started, we had the experience of different geographical locations, and a blend of the knowledge of what had worked in some of the best schools in the United States. . . . Suddenly, we weren't just a bunch of guys in a pine forest. What we had was working.

And it continues to work. The University of North Carolina School of Medicine has come far since the first M.D. degree was given in 1954, and much of the credit must go to Dr. Berryhill. He served dynamically as dean of the school from 1941

to 1964, and now, at 72, is still active as an Emeritus Professor of Medicine in the division of education and research in community medical care, a division which Dr. Berryhill himself established after he retired as dean.

His list of achievements is open-ended, for his strong spirit, drive, and devotion to the school defy inactivity. He has lived and will continue to live a life based on love and loyalty, and lived through principles and people; hopefully, these qualities will pervade the halls of the new "Berryhill Hall" at the University of North Carolina School of Medicine.

J.C.D.

Moseley Fellow to Study in England

William U. Shipley '66 will spend the next year at the Royal Marsden Hospital as the 1973-74 Moseley Traveling Fellow. Dr. Shipley, who is chief resident at Harvard's Joint Center for Radiation Therapy, will study with Dr. M. J. Peckham in the department of radiation therapy.

Basically interested in tumor cell kinetics, Dr. Shipley's research will involve radiation-induced solid tumor "stem" cell recruitment. In addition, he will participate in clinical radiation therapy services on the Lymphoma Unit and the Head and Neck Tumor Unit of the Royal Marsden. He will also be part of the on-going clinical fast neutron-project at the Medical Research Council Unit at Hammersmith Hospital.

Following graduation from HMS, Dr. Shipley was a research associate at the National Cancer Institute from 1968-70 and an NIH scientist in the department of surgery at the Massachusetts General Hospital from 1970-71. He is a member of the American Association for Cancer Research and the Radiation Research Society.

Editorial

Where are your priorities, we imagine being asked, with issues about the delivery of medical care, and about death and dying, and now — yachting! And we imagine being confronted, at one door, with the outraged alumni who found death and dying too lugubrious a subject, and at the other by social activists who find yachting too materialistic.

Let us point out that some objects are not material. Remember the legal dispute about whether a piano is a musical instrument or an article of furniture? One can add to this the observation that the piano is a machine, which makes a pianist a machine-operator, with all the attendant implications of alienated drudgery. Indeed, the majority of those who were forced to take piano lessons as children are entitled to view it this way. The piano, however, God's (or Plato's) piano, is a majestic portal for an infinity of music existing and still to be created.

Back to the yacht. How poor our coasts and lakes would be in summer without trim hulls and white sails! And how could mankind afford to miss the perfect union with nature, wind and sea, which is required for a ship to sail? If yachting did not exist, as Voltaire said of God, it would be necessary to invent it.

We hope that readers who are not sailors will enjoy reading about days of sail, and what they mean to friends and classmates. Perhaps there are enough enthusiasts to make it an annual regatta? Please let us know — our best and highest function is reporting about you.

Promotions and Appointments

Associate Professor

Howard L. Bleich: medicine
Charles B. Carpenter '58: medicine
Lester Grinspoon '55: psychiatry at Massachusetts
Mental Health Center
Michael V. Herman: medicine at Peter Bent Brigham
Hospital
Daniel A. Pollen '60: physiology in the department of
surgery
Peter Reich '56: psychiatry at PBBH
Shaun J. Ruddy: medicine
Kurt F. Schmidt: anesthesia at PBBH
Warner V. Slack: medicine
Veronica B. Tisza: psychiatry at The Children's Hospital

Ross E. Rocklin: medicine
S. Robert Snodgrass '63: neurology
Norman J. Uretsky: pharmacology in the department
of neurology
Roger S. Wilson: anesthesia at MGH
Nathaniel A. Young: medicine

Assistant Clinical Professor

William P. Beetham, Jr.: medicine
Carl L. Birk: psychiatry
Alfred J. R. Koumans: psychiatry
Edward Messner '54: psychiatry
Frank J. Takacs: medicine

Associate Clinical Professor

Martin A. Berezin: psychiatry
Arthur P. Hall: medicine
Arthur F. Valenstein: psychiatry

Principal Research Associate

Richard H. Underwood: medicine (biochemistry)

Assistant Professor

Christos A. Athanasoulis: radiology at Massachusetts
General Hospital
Jonathan F. Borus: psychiatry at MGH
Charles M. Bryant: psychiatry at MGH
Edwin H. Cassem '66: psychiatry at MGH
Clyde S. Crumpacker II '65: medicine
Brian C. Dalton: anesthesia at MGH
Hugh M. Firemark: neurology
Solomon J. Fleishman: medicine at the Harvard
Community Health Plan
Edward J. Goetzl '66: medicine
Elizabeth J. Hedley-Whyte: neuropathology at TCH
Adolph W. Karchmer '64: medicine at MGH
Martin J. Kelly, Jr.: psychiatry at PBBH
Edward J. Khantzian: psychiatry at Cambridge Hospital
Barbara A. Ray: psychology in the department of
psychiatry
Anthony E. Raynes: psychiatry at Boston City Hospital
Glenn H. Roberson: radiology at MGH

Internship List

In general, all internships and residencies* start July 1, 1973 for one year.

John B. Adams
Presbyterian Hospital,
New York, *Medicine*

Richard A. Anscheutz
University of Washington Affiliated
Hospitals, Seattle, *Medicine*

Charles H. Antinori
Presbyterian Hospital,
New York, *Surgery*

Stephen S. Arnon
University of Colorado Affiliated
Hospitals, Denver, *Medicine*

Robert F. Asbury
Massachusetts General Hospital,
Medicine

John J. Bandeian
Strong Memorial Hospital,
Rochester, *Surgery*

John F. Beary
Johns Hopkins Hospital,
Baltimore, *Medicine*

Charles D. Belcher
Los Angeles County Harbor General
Hospital, Torrance, *Rotating*

Edward J. Benz
Peter Bent Brigham Hospital,
Medicine

Stephen J. Bergman
Beth Israel Hospital,
Boston, *Medicine*

Daniel C. Burnes
Mary Hitchcock Memorial Hospital,
Hanover, New Hampshire, *Medicine*

Eric D. Caine
Massachusetts Mental Health Center,
*Psychiatry**

Thomas C. Campbell
New England Deaconess Hospital,
Medicine

Steven C. Carabell
Long Island Jewish-Hillside Medical
Center, New Hyde Park, *Rotating*

Gary B. Carpenter
University of Minnesota Hospitals,
Minneapolis, *Pediatrics**

Mark R. G. Chassin
Los Angeles County Harbor General
Hospital, *Medicine*

Charles E. Clemmensen
David Grant Memorial Hospital,
Fairfield, California, *Medicine*

John J. Coleman
Grady Memorial Hospital,
Atlanta, *Surgery*

I. Kathleen H. Cook
Massachusetts General Hospital,
Surgery

Joseph C. Corkery
Massachusetts General Hospital,
Pathology

Christopher T. Coughlin
Good Samaritan Hospital,
Portland, Oregon, *Medicine*

Linda M. Covell
Beth Israel Hospital,
Pathology

Rex W. Cowdry
Massachusetts Mental Health Center,
*Psychiatry**

Gordon B. Cutler
Barnes Hospital,
St. Louis, *Medicine*

Carolyn G. Dedrick
Massachusetts General Hospital,
*Radiology**

Betty A. Diamond
Presbyterian Hospital,
Medicine

Richard A. Dobrow
Boston City Hospital,
Medicine

Bruce R. Donoff
Massachusetts General Hospital,
*Surgery**

James H. Doroshov
Massachusetts General Hospital,
Medicine

Churchill G. Dunn
Yale-New Haven Medical Center,
*Psychiatry**

John H. Eichhorn
Beth Israel Hospital,
Surgery

William D. Ensminger
Beth Israel Hospital,
Medicine

Charles M. Epstein
Grady Memorial Hospital,
Medicine

Peter D. Ewing
Buffalo General Hospital,
Buffalo, *Medicine*

William E. Falk
Hartford Hospital,
Hartford, Connecticut, *Rotating*

Douglas E. Feldman
Beth Israel Hospital,
Surgery

Ronald S. Fischler
New England Medical Center Hospitals,
Pediatrics

Robert F. Fowles
Stanford University Affiliated Hospitals,
Medicine

Frederick J. Fox
University of Washington Affiliated
Hospitals, *Medicine*

Arthur E. Frankel
Yale-New Haven Medical Center,
Medicine

Howard L. Freedman
University of Washington Affiliated
Hospitals, *Medicine*

Steven A. Freedman
Massachusetts Mental Health Center,
*Psychiatry**

Daniel J. Friedenson
Hartford Hospital,
Rotating

Richard M. Fulks
St. Louis Children's Hospital,
Pediatrics

Stephen J. Galli
Massachusetts General Hospital,
Pathology

Gregory G. Gallico
Massachusetts General Hospital,
Surgery

Stephen E. Gellis
Children's Hospital Medical Center,
*Pediatrics**

Richard G. Glogau
Pennsylvania Hospital, Philadelphia,
Medicine

Norman V. Godfrey
Bellevue Hospital Center,
New York, *Surgery**

Jay H. Gold
Duke Medical Center,
Durham, North Carolina, *Pathology*

Ronald S. Goldberg
Los Angeles County Harbor General
Hospital, *Rotating*

Robert J. Goldstein
Beth Israel Hospital,
Medicine

Allan H. Goroll
Massachusetts General Hospital,
Medicine

Drayton P. Graham
Los Angeles County Harbor General
Hospital, *Medicine*

Jane P. Green
Johns Hopkins Hospital,
*Pediatrics**

John R. Guyton
Parkland Memorial Hospital,
Dallas, *Medicine*

William E. Halperin
Beth Israel Hospital,
Medicine

Lucy E. Hann
University of Pennsylvania Hospital,
Medicine

Noah A. Harris
University of Minnesota Hospitals,
Medicine

Lewis L. Haut
Bronx Municipal Hospital Center,
Medicine

Frederick L. Hayden
Case Western Reserve University
Affiliated Hospital, Cleveland, *Surgery*

David Heber
Beth Israel Hospital,
Medicine

Paul A. Heineken
Independent Study

Daniel B. Hier
Bronx Municipal Hospital Center,
Medicine

Terrance A. Hill
University of California Hospitals,
Los Angeles, *Medicine*

Paul H. Hirshman
Peter Bent Brigham Hospital,
Surgery

Mark S. Hochberg
Massachusetts General Hospital,
Surgery

Steven M. Hohf
Jewish Hospital of St. Louis,
Medicine

Stephen M. Hosea
Massachusetts General Hospital,
Medicine

Belle Huang
San Francisco General Hospital,
Rotating

James E. Hult
Peter Bent Brigham Hospital,
Surgery

John F. Hutchinson
Virginia Mason Hospital,
Seattle, *Medicine*

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Boston, *Rotating*

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Medicine

Kenneth K. Lee
Kaiser Foundation,
San Francisco, *Medicine*

Spencer B. Lewis
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Rockford, Illinois, *Family Practice**

Gershon Y. Locker
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Medicine

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Hospital, *Medicine*

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Boston, *Medicine*

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Hospitals, Ann Arbor, *Medicine*

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Belmont, Massachusetts, *Psychiatry**

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Providence, *Rotating*

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New York, *Medicine*

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Hospitals, *Family Practice**

Richard A. Moskowitz
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Cambridge, *Rotating*

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Yale-New Haven Medical Center,
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Medicine

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St. Elizabeth's Hospital,
Boston, *Medicine*

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Hospital, *Medicine*

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Medicine

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Medicine

Boris M. Peterlin
Stanford University Affiliated Hospitals,
Medicine

John T. Philbrick
Buffalo General Hospital,
Medicine

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Massachusetts General Hospital,
*Pediatrics**

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Medicine

Elizabeth B. Rappaport
Hennepin County General Hospital,
Minneapolis, *Rotating*

James L. Reinertsen
San Francisco General Hospital,
Medicine

Deanna G. Ricker
New England Deaconess Hospital,
Medicine

Jonathan I. Ritvo
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University of Chicago Clinics,
Medicine

David L. Rutlen
Peter Bent Brigham Hospital,
Medicine

David A. Samuels
Massachusetts General Hospital,
Medicine

Luis T. Sanchez
Cambridge City Hospital,
Rotating

R. Kent Sargent
Peter Bent Brigham Hospital,
Medicine

Edward A. Sassaman
Children's Hospital Medical Center,
*Pediatrics**

Robert T. Savage
University Hospital of San Diego County,
Medicine

David M. Shahian
Massachusetts General Hospital,
Surgery

R. Waid Shelton
University of Alabama Medical Center,
Birmingham, *Medicine*

Joseph R. Simpson
Michael Reese Hospital and Medical
Center,
Chicago, *Medicine*

Stephen H. Sinclair
Massachusetts General Hospital,
Surgery

Burton Singerman
Cleveland Metropolitan General,
Medicine

Robert J. Smith
Duke Medical Center,
Medicine

Robert W. Sorrenti
Children's Memorial Hospital,
Chicago, *Pediatrics*

Lawrence Steinman
Stanford University Affiliated Hospitals,
*Surgery**

Philip W. Taylor
Peter Bent Brigham Hospital,
Medicine

David F. Tee
Parkland Memorial Hospital,
Medicine

Jesse E. Thompson
University of California Hospitals,
*Surgery**

William P. Thorpe
Massachusetts General Hospital,
Surgery

I. Ridgeway Trimble
University Hospital of San Diego County,
*Surgery**

George L. Tully
Parkland Memorial Hospital,
Medicine

Steven Varga-Golovcsenko
San Francisco General Hospital,
Rotating

Albert A. Varner
University of California Hospitals,
Medicine

Michael C. Walter
Parkland Memorial Hospital,
Surgery

Donald L. Weaver
Children's Hospital Medical Center,
*Pediatrics**

Joseph A. Weinberg
Los Angeles County Harbor General
Hospital, *Pediatrics**

Steven E. Weinberger
University of California Hospitals,
Medicine

Daniel N. Weingrad
Peter Bent Brigham Hospital,
Surgery

Michael M. Wick
Peter Bent Brigham Hospital,
Medicine

Ronald P. Winfield
New England Medical Center,
*Psychiatry**

Robin B. Winkler
University of Colorado Affiliated
Hospitals, *Pediatrics**

Gordon Worley
Yale-New Haven Medical Center,
*Pediatrics**

Douglas H. Yock
Stanford University Affiliated Hospitals,
Rotating

Robert H. Yolken
Yale-New Haven Medical Center,
Rotating

Melvin Young
Beth Israel Hospital,
Surgery

Barry R. Zitin
Massachusetts General Hospital,
*Psychiatry**

Melinda K. G. Zitin
Massachusetts General Hospital,
*Pediatrics**

Ocean Racing:

The 1972 Bermuda and Transatlantic Races

by George H. A. Clowes '41

Racing at sea harks back to the dim past, probably as long as man has been afloat. The great tea clippers competed with each other from China to England to reach the market first. And in the last century large yachts were raced across the Atlantic by professional crews with huge wagers placed on the outcome. Starting from small beginnings such as the Bermuda Race in 1905, ocean racing in small sailing yachts has become remarkably popular the world over. In the United States alone, more than 10,000 yachts ranging from 20 to 75 feet are registered in this category by the North American Yacht Racing Union. Annually, thousands of amateur sailors participate in this cold, wet, and fatiguing sport. Races vary from overnight courses of one hundred miles or less, to the great major ocean races which include such events as the Bermuda, Transatlantic, Transpac to Hawaii, the Fastnet in Britain, and the race across the Tasman Sea to Australia. What is the fascination of this trying and at times dangerous game that draws people to it and has resulted in millions of dollars being spent to build vessels specifically for the purpose of fast sailing miles offshore?

Perhaps this yarn of our adventures last summer in the Bermuda Race and the Trans-Atlantic Race from Bermuda to Spain will convey some of the charm of voyaging in a small boat combined with the excitement of sustained competition. Beset as this voyage was by gales and calms, I hope it will awaken pleasant memories for the old hands, and to the uninitiated will

give an idea of the ingredients essential to long voyages, especially ocean racing.

The three absolute necessities are (1) an able, fast well found vessel, strongly constructed with the necessary gear and sails; (2) a crew each of whom is tough and a good sailor (There is no room aboard such a small vessel at sea for passengers); and (3) perhaps most important of all, experience in seamanship, navigation, and the art of making boats sail fast in fair weather and foul.

Challenge is a 43 foot yawl built of fiberglass in Finland to the design of Sparkman and Stephens of New York. She is a PJ 43, or as the class is known in Europe, a "Swan 43." Experience sailing, racing, and cruising her during the summer of 1971 disclosed certain defects, especially an inability to steer well downwind with a big sea running. Although the class was designed for a sloop rig with a single mast, *Challenge* is rigged as a yawl. It is my belief that the small sail aft while cruising and when at sea offers many advantages of control, as well as extra sail area while sailing off the wind. Therefore, after consultation with the designers, the rudder was rebuilt and enlarged the following winter at the Falmouth Marine Railway. An excellent job was done and she has steered well since, being if anything, faster than before. Because the handicap time allowance in racing against boats of different sizes and designs is based upon the application of exact measurement of hull and rig to a formula known as "Mark III IOR

rule," great care was taken to reduce to a minimum all parts of the sail plan in order to obtain as small a rating as possible. Thus *Challenge* floating on a 32 foot waterline was found to have a rating length of 32.8 feet, about par for a competitive ocean racer.

As usually happens with shipyards, there were unforeseen difficulties with the modifications. *Challenge* was not launched until early May, leaving but a few precious weekends before we had to report to Newport for the start of the Bermuda Race on June 16. The crew had to be drilled to familiarize themselves with each detail of the rigging. On the darkest night the men changing a headsail on the foredeck must instinctively put their hands on the correct halyards or winches. To make certain that nothing was overlooked and to tune up *Challenge* in competition we entered the Whaler's Race early in June from New Bedford around Block Island losing only to a much larger vessel. Second place in the fleet was encouraging. Finally, one bright Sunday morning after all stores, water, life saving equipment, tools, and spare gear of every description had been put aboard, Jack Merrill, an official inspector of the Cruising Club of America, paid *Challenge* a visit. He was satisfied with what he found and we were ready for sea.

Having said good-bye to my colleagues on the surgical service and in the laboratory three days before the start of the race, my son, Alec, (HMS '72), David Millet (son of Bradford Millet HMS '42), their wives and I drove to Woods Hole to set sail for Newport. There we were joined by the rest of our crew; Ross Sherbrook, Francis Brooks, Charles Koch, Charles Welch and Steven Riggs. A finer group of able sailors one could not have desired. All but two had sailed previously in at least one Bermuda Race. Alec served as first mate, and Ross as second, each being responsible for a watch. Frannie and I did the navigating, while Charlie Welch and Dave Millet took turns serving up fine hot meals, even during the gale which caught us in the latter part of the race.

The evening before the race at the skipper's meeting we were given the handicap sheets. *Challenge* was in Class D, competing with 30 other boats of nearly equal rating. Of course we were also to race against all boats of the other classes for overall prizes. In all they numbered 170 sails, the largest fleet ever to sail a Bermuda Race. Good weather was forecast. Details concerning the northern edge of the Gulf Stream and its eddies or "meanders" were given by Jan Hahn of the Woods Hole Oceanographic Institute. These eddies are of great importance because a boat that succeeds in entering the "stream" on the south going side of an eddy may gain greatly on others that do not.

The morning of Friday, June 16, dawned foggy, but by noon when we had sailed out to the Brenton Reef light tower for the start, it was clear and blowing freshly from the southwest. Competitors and spectator yachts were sailing about in every direction. A careful watch ahead and to leeward was essential to avoid an accident. The two classes smaller than ours started ahead of us. The long anticipated moment had arrived, it was our turn. The warning gun was fired by the destroyer at the windward end of the line. There was but one choice; to start close hauled starboard tack on a southerly course. Because of the crowd of boats with possible

fouls or premature starts at the windward end of the line, we elected to go for the middle. Fortunately *Challenge* crossed the line going full speed with a clear wind as the starting gun was fired at 1330. A larger and presumably faster boat was just to windward of us. Fortunately we were able to work up under his lee bow. Our backwind caused him to slow down and drop off to leeward under our stern. Much to our delight and despite her yawl rig, *Challenge*, under full sail with our large heavy genoa jib set, was sailing just as fast closehauled as our sloop-rigged sister ships of which there were seven in our class. All that afternoon and evening we sailed south on the starboard tack. As the wind grew lighter, one vessel after another changed to a larger, lighter jib, losing a minute or two as they did so. We began to overtake the smaller boats that has started before us. Some of the larger vessels overhauled us. The sun went down into a bank of clouds lying to the west

away. Thus, a number of the boats began to sag off to the eastward, fortunately for them as it later proved. The winner *Noryema* actually went as far as 85 miles east. Yet, another well tried rule of the Bermuda Race is not to fall off to the east of the direct course because of the strong set of the Gulf Stream and the variable winds near Bermuda. We appeared to be doing well and held on to the rhumb course for Bermuda. All the next day we sailed on closehauled in beautiful calm weather. Sun and star sights were worked out. Watches were changed every four hours and meals were served with regularity. Our noon position put us some 150 nautical miles from Newport right on our course. The weather became warmer. The water temperature began to rise. As one enters the Gulf Stream the water temperature suddenly jumps from 70° to near 78°. Early on the morning of June 18 several squalls passed over us. By then Hurricane Agnes was making up in the Gulf



And so it begins . . .

and northwest. As darkness settled over the sea, running lights were scattered all around us as far as the eye could see. The radio weather report at midnight predicted that a cold front with strong northerly winds would overtake us, but it never materialized.

One of the secrets of ocean racing when going to windward is to keep a boat footing as fast as possible in the general direction of the finish. Bermuda was nearly 600 miles

of Mexico and starting to move north. The radio forecasts predicted that it would not come near us which was comforting. However, there was talk of a satellite depression developing in the Bahamas that might produce southeasterly winds. As we entered the northern edge of the Gulf Stream the wind became lighter and shifted to the south. We held on to the starboard tack sailing away to the southeast. The noon position found us placed well to the south of our dead reck-

oning, suggesting that we had succeeded in entering the south-going current of the "meander." We were also 40 miles to the east of the rhumbline and nearly half way to Bermuda. So when the wind did shift to the southeast, we tacked. With the wind on the port bow *Challenge* was fetching the course to Bermuda. We still had numerous vessels around us. Some of these were identified as being in our own class and others in larger classes. At sea it is impossible to tell how big a vessel is unless one can recognize her by number, hull color, or some other characteristic.

The evening of Thursday, June 19, 150 miles from Bermuda, we thought we were in a good position relative to most of the other boats, thinking the fleet was surely to the west of us. I am afraid we took little stock of those to the east since we were still sailing along directly toward Bermuda. However, the sunset was an ominous yellow brown although the barometer had not yet begun to fall. All night the wind freshened and the sea began to build. The radio began to make it quite clear that the depression would pass over Bermuda on a northerly track and that we were to be in for a dusting.

By morning the south east wind was blowing 30 knots and we were down to a small genoa jib with reefed main and mizzen. Although *Challenge* was jumping about and everything was soaked with spray we were still doing seven knots on our course. Then the wind rose and it began to rain in sheets. Having rolled in as much of a reef in the main as we could, the next step was to set the small working jib. With wind recording 45 knots on the anemometer, the mainsail was lowered and furled. In its place the little storm trysail was set. Still *Challenge* sailed at six knots up and down over the seas which by then had reached 15 to 20 feet, breaking continuously. Because of the rain and blowing spray one could see but a few hundred yards.

Under these conditions even the simplest acts below decks become difficult. Despite every effort to keep wet clothing aft, the bunks and other parts of the vessel get damp. The intellectual effort of navigation becomes difficult even if one is not seasick. Cooking, despite a safety belt supporting the cook near the stove, is an athletic feat requiring a strong stomach. Charlie and David distinguished themselves by producing simple, but hot food throughout the gale. Nothing contributes more to good morale.

Despite every effort to ease her over the crests, every now and then, *Challenge* would rush over the top of a steep sea and crash shuddering into the trough behind. One wondered why the rigging did not part. Finally, about 10:00 a.m., when the wind reached 55 knots, it seemed wise to slow her down by taking off the working jib and hoisting the very small storm jib.

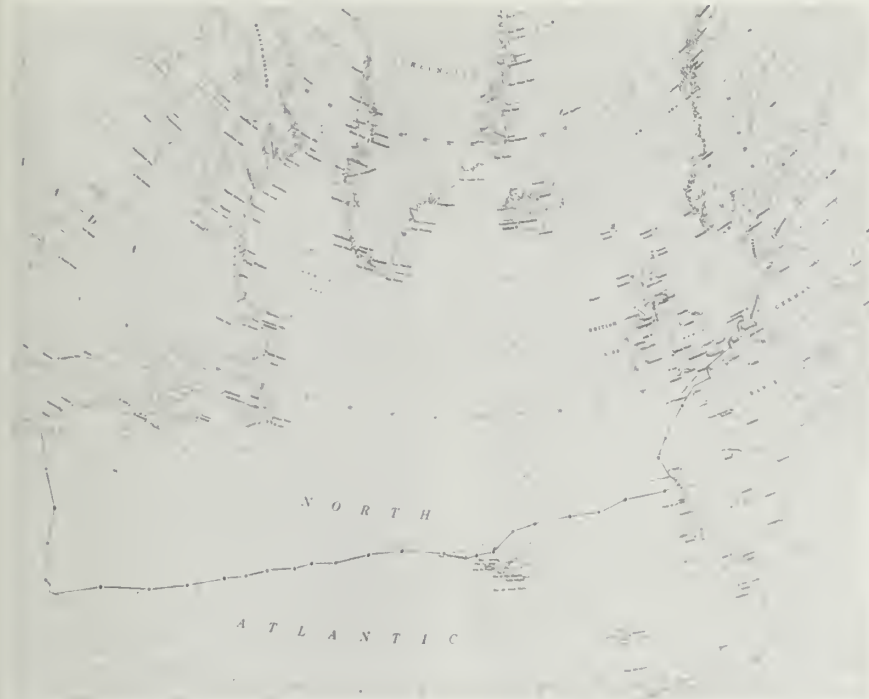
Some of the large vessels had finished off St. David's Head the night before and had to remain hove to in the lee of the island. While working with the radio direction finder we heard radio communications indicating that various vessels were in trouble with parted rigging, damaged rudders, and three had broken their masts as they approached Bermuda. Then I was thankful to have slowed *Challenge* down for two or three hours.

At best, the approach to Bermuda is tricky in overcast heavy weather, even with a radio direction finder, the only electronic navigation instrument permitted in this race. Because of coral reefs that extend out in a circular pattern some 25 miles to the north of the island, one cannot sail directly toward the radiobeacons at Kindly Field and on Gibbs Hill. Rather, to approach St. David's Head at the eastern end of the island, one must either sail entirely around to the west of Bermuda and approach from the south, or one must skirt the shoals to the east. Thus, it is imperative to know how far one is to the north. Because

of our leeway caused by the big seas, our best guess was that we were some 50 miles north of Bermuda early that afternoon.

The wind began to abate. More sail was put on. Then it began to clear. Rapidly the wind dropped and the sun came out. I was able to get a couple of sun sights. Under the circumstances of a big sea and a boat jumping about, they could not be considered accurate, but only gave an approximate line of position. However, the clouds rapidly closed in again and the wind came howling out of the south. I believe we actually had gone through the eye of the storm. A cross sea rapidly built up making sailing difficult. On the starboard tack we stood on to the southeast wondering just how far off Bermuda we were. Toward the latter part of the afternoon the wind began to decrease. Reefs were shaken out. The largest light genoa jib was finally set. In the failing wind, we forged slowly on, wildly rolling and pitching in the large left-over sea. The greatest frustration of all came about midnight when the wind dropped out completely. There is almost nothing worse than a sailing boat becalmed in a seaway. All one can do is hold the booms firmly with tackles to stop them from slamming back and forth. Still the sails slat and bang on each roll. One wonders whether the sails will be chafed or torn.

However, to cheer us, the sky cleared. With morning star sights and the direction finder bearing we found ourselves some 20 miles to the northeast of St. David's Head. We had been set during the night nearly 20 miles to the east by the current running by Bermuda. With the first breath of the morning southwester we got the boat into the port tack and sailed westward, the course on which we could make the best progress in the left-over swell. The hills of Bermuda came up over the horizon. Off the Kitchen Shoal light buoy we tacked as we were just able to fetch St. David's Head. All hands came on deck to dry out. There was much merriment in the warm sun. From the north-west a vessel appeared carrying a spinnaker. We identified her as a



Challenge's chart.

member of our class. We could not carry a spinnaker. As she rounded the buoy she had to douse hers. We sailed on toward St. David's Head side by side crossing the finish line almost simultaneously at 1034 on Wednesday, June 21, a few hours less than five days from Newport, rather a slow passage.

It was then but a short sail to the passage through the reefs. Instead of proceeding up to Hamilton through the channel inside the shoals to the north of Bermuda, it was decided that we should go into the lovely little harbor of St. George's at the eastern end of the island. As we approached the Dinghy Club where we had been so hospitably treated after former races, we were glad to see that not too many vessels were there. They kept coming in all afternoon. Our arch rival "Adele" arrived with the Burnes Family (Danny Burnes HMS '73) on board some two hours later. After a welcome shower in the white Dinghy Club I was hailed by a raucous cheer from the porch of the "Cock and Kettle," an inn on the square opposite which *Challenge* was moored. There were all our crew drinking swizzles. Our wives appeared and a happy group chartered taxis to go to the Royal Bermuda Yacht Club in Hamilton to

clear customs and to find out how we had done in the race. It turned out that *Noryema*, an English vessel in Class C, had won overall. *Dove*, one of our sister ships, won in our Class D. On corrected time we were seventh in our class having been beaten by half of the other PJ 43's and having beaten the other half. We were glad to be there.

I will not dwell on the pleasant week we spent in Bermuda preparing for the Trans-Atlantic Race to Bayona on the northwest coast of Spain. It was a bust time. My wife, Peggy, who flew down to meet us worked like a beaver. Despite the fact that she will cruise anywhere, she shuns the ocean races. As the crew arrived they pitched in to work all day, and enjoy the delightful parties each evening. Although many boats had sustained considerable damage and there were three dismastings, I was relieved to find virtually nothing wrong with *Challenge*.

As fleet surgeon of the Cruising Club, I put together a list of medical supplies for the vessels that might be needed should advice be requested by radio at sea. Burns are something of a hazard, especially while cooking at sea. To obtain a supply of sulfamydon for each boat

proved to be a problem. Through the kindness of Dr. John Stubbs, a surgeon in Bermuda, we finally arranged for a shipment from New York which arrived the evening before we were to start.

The Trans-Atlantic race, Regatta del Descabrimiento, commemorates Columbus's triumphant return voyage in the *Pinta* by the same route via the Azores to Bayona in the Rio Vigo on the northwest coast of Spain. The start was June 29, delayed one day to permit certain of the competitors to complete repairs of damage sustained in the Bermuda Race. Of the 48 vessels which started, there were only three which were smaller than *Challenge*.

Charlie Koch and I were the only remaining members of the Bermuda Race crew, but we had another fine group of sailors on board as we sailed out from St. David's Head to the start. My old friend and sailing companion, John Hallowell, was first mate with Charlie Koch and my daughter, Edie, in his watch. Worth Loomis was the second mate with his brother, Bob, and Bradley Dewey III in the port watch. On this race all hands took turns cooking. We carried no ice, and were entirely dependent upon canned and dried foods. Fresh meat and vegetables were consumed within a few days. From time to time baking was undertaken, but we ate well all the way across. Our only problem was that after two weeks the bread shipped in Bermuda began to get mouldy. However, fresh eggs remained good throughout the three-week passage.

At 1345 when the ten boats in our class started off the Mills Breaker Buoy, the bigger boats, which had started earlier, were already hull down over the horizon. It was a beautiful, clear day with a fresh southwest wind whipping up white-caps. The start was just as if we were out for an afternoon race instead of setting forth on a voyage of 2700 miles across the Atlantic. All ten vessels crossed the line as the gun went off on the tug that marked the weather end of the line. Within

seconds our able crew had spinnaker and mizzen staysail set. After we were clear of the other vessels, it was a pleasure to see *Challenge* slowly forge ahead of her competitors. In our class was another PJ-43, *New World*. With the fine breeze on the quarter our yawl rig gave us a slight advantage. The course was set at 75° magnetic to sail slightly to the north of the great circle course to Flores in order to avoid the calms in the huge high pressure area lying to the west and south of the Azores.

On we sailed, at times surfing down the seas, averaging seven knots or better. By nightfall we had actually overhauled some of the boats in Class C. About 2200 the moon rose red ahead of us in the clear warm night. Around us the running lights of our competitors twinkled. It was a sailor's dream.

Early that morning the wind freshened and shifted more to the west necessitating a gybe to a course of 55°. As the morning wore on we were able to gybe back to the starboard tack and resume our course of 75°. We still could see *Fjord VI*, German Frere's Argentine entry astern. Four sails were visible ahead. A noon sight indicated that we had sailed 170 miles since the start, not a bad beginning.

In order to keep the wind from being dead aft we often sailed a more easterly course. At 1400 by radio the vessels reported their position to Don Gumpertz's motor yacht *Westward* which accompanied the fleet across. From this we found that *Challenge* was, indeed, doing well. The temptation to sail on to the east was irresistible despite our desire to work northward. For several more days we sailed on, constantly trimming sails to keep them drawing at maximum efficiency. The third day out our course took us through a great school of whales, nearly colliding with one monster which surfaced just ahead of our bow.

Early each evening when the weather was fine we had a glass of sherry all round and the crew gathered in the cockpit during the dog watch before supper for a round of singing. With several excellent voices aboard and the talents of Worth and Charlie on the guitar, the old favorites from the Yale song book sounded wonderful.

As the days progressed, the wind became lighter and more variable. The sea was calm. Frequent sail changes and constant trimming were necessary. The high moved north westward actually becalming some of the larger boats that had followed a course further to the south than ours. Still we were making good day's runs of between 130-150 miles.

However, the morning of the Glorious Fourth dawned hot and calm. Some of the crew actually went swimming. As the sun rose it became hotter. *Challenge* could only be kept moving by carefully trimming our lightest spinnaker to each little puff. Our day's run was only 88 miles and even less the next. Although the radio reports at "roll call" showed us to be actually ahead of some of the monsters in Class A, boats only 60 miles north of us were forging ahead at six knots. *Carina*, the ultimate winner, had been doing so poorly that on the third day she turned to a course of nearly north. For a day she had sailed 60° away from the direct course. This paid off for she was in strong winds well north of the great high.

Dr. Clowes takes a reading.



On the afternoon of July 5 several rain squalls passed over us. From the sails we were able to gather in buckets several gallons of fine fresh water to supplement our supply. With the squall's passage the southwest wind returned. Imagine our surprise as two huge sails came up over the horizon astern to be identified as *Jubilee*, the Navy sloop, and *Blackfin*, both in Class A.

The calms were not over. In the log on July 5 a note made after a sail change to take advantage of a light northerly puff reads: "Making three times the progress we were before—at 3 knots." By this date the plotted radio positions showed that our sister ship *New World* which had worked further north, was some 100 miles ahead of us, nearly a whole day's sailing. That night all hands were cheered when we were able to raise New York on the radio and talk to my wife, Peggy, at home in Dover. Everyone sent messages to be relayed to wives or sweethearts.

Patience and long hard hours of sail changes were rewarded. After a night of intermittent squalls and calms, the good southwester returned. We were boiling along again with spinnaker and staysails set. Unfortunately it was discovered that one of the two jib halyards was lying useless on the deck. In the activity of the night before the end had not been secured and it had run up through its shive at the top of the mast. That was a major loss to sail setting efficiency. Because the sea was still reasonably calm and the vessel quite steady, I was hoisted in the bosun's chain to the masthead to undertake the job of rereveing the halyard down through the mast. The view of *Challenge* sailing along through the blue tropical sea way below was truly a beautiful spectacle. Within an hour the job was done.

For several days the wind was variable. Sometimes we were reaching at others running with the spinnaker set. The day's runs varied between 140 and 155 miles. Then on the 10th of July the wind came in strong from the west. As the boat rushed down the white capped seas the speedometer often

reached its maximum of thirteen knots where it held for breath taking moments. Our noon position on the 11th of July showed that we had sailed 200 miles in the preceding 24 hours, a great run for a small yawl of *Challenge's* size.

However, to dampen our ardor, the radio told us that more than half the fleet had rounded Flores. Here we were still 100 miles west of the island. But on we sailed rejoicing in the fine winds.

As the night fell, a bank of clouds built up astern promising a change of weather. Shortly after dark, with scarcely time to lower the spinnaker, we were hit by a vicious squall in which the wind registered up to 45 knots. As often happens after the passage of such squalls, the wind dropped out. We were left shifting sails to catch every little puff of wind. That is hard, tiring work, handling wet soggy sails, but about midnight we were encouraged by sighting the loom of the powerful lighthouse on the southern

point of Flores. Toward morning a clear northerly breeze came in and by 7:00 we had the island abeam some five miles distant. The sharply eroded volcanic cliffs, topped by bright green fields, stood out sharply. The little white town of Santa Cruz was lit up by the bright sun. It seemed a shame to sail right by this jewel after so many days at sea. To our dismay a small vessel was observed sailing along under the cliffs. The more pessimistic members identified her as *Penelope* or *Prim*, the two smallest vessels in the fleet. We were not doing well.

To our delight we slowly overhauled several other sails in the afternoon. Apparently we were sailing in better wind. By nightfall when again the calm had returned we could count ten sails around the horizon. For two more days the winds were light and variable. There were more squalls and more water was collected to supplement our supply. The isobar analysis in the weather reports relayed over the radio by *Westward* described a remarkable change in the dreaded Azores high. An arm of the high stretched all the way up to the British Isles while another extended east to Africa. In the hope that wind might be found in the shallow trough lying between we did not follow the fleet, most of which had turned northward after leaving Flores. Rather we sailed slowly on, directly toward Cape Finistère.

July 14, Bastille Day, was celebrated by congratulations over the radio at report time to the French crew of *Penelope*. They returned with a toast, they said, of Burgundy wine. All day in the calm we could see a line of clouds to the east. Using every puff and trick of sail trim *Challenge* was finally worked into the clouds by evening. Almost without warning we found ourselves rail down closehauled to a fresh southeast wind. *Perelandra*, a 55 yawl, was only a mile behind us as we entered the wind line. She must have remained in the calm for some time afterward, for it took her a day and a half to overhaul us again. Our strategy was paying off. At report time the next day we were ahead of quite a number of the boats which had sailed to the north of us.

During the next few days, the wind backed to the northeast and then to the north. As the weather became colder, sweaters and jackets were brought out for the first time. Frequently we sailed in company with larger boats. Again after a brief calm the wind shifted back to the west. Early in the morning of July 18 the spinnaker and other light sails were set. Slowly we overhauled a sail which appeared over the horizon ahead. She proved to be *Elske*, one of the larger vessels in our class. We were in the race again. All day we sailed side by side running hard before the rising wind. Great excitement as we began to close with the Spanish Coast, now only 200 miles away. Other sails appeared. That night we lost *Elske* as we drove on before an ever increasing wind. Toward morning our position was established by radio direction bearing to be somewhat north of our clouds. At 0230 *Challenge* was gybed to the starboard tack for the last leg toward Bayonna. Again this was a fortunate decision, for boats which stood in closer to the Spanish Coast had less wind while we were able to keep all sails drawing to the maximum with the wind on our quarter.

The excitement of an anticipated landfall and the approaching end of a race is almost unbearable. One wonders whether one is really where the RDF bearings and celestial sights put the ship's position. All day we took numerous sights of the sun which proved somewhat unreliable because of the increasing haze. Although *Jubilee* had finished first, shortly followed by *Carina*, the radio report on the last afternoon showed us to be heading our Class D. We could scarcely believe it as Johnny Hollowell carefully plotted the position of each boat.

High in the bosun's chair.



To make matters even more tricky, the wind dropped at sunset to a mere zephyr and the fog settled down. All night we could hear the whistles of the great steamers passing up and down that busy seaway off the Spanish Coast. With but two or three knots of breeze we kept *Challenge* reaching along using a small flat storm spinnaker instead of a jib.

At the mouth of the Rio Vigo is a direction finder radio beacon, but outside that lie shoals. It was a pretty navigational problem to know the right moment to turn into the mouth of the river.

As luck would have it, when the early grey light of dawn came, we found ourselves with the peak of a mountain looming over us above the fog, right where it should be. We sailed slowly up the river on the last of the dying wind. *Perelandra* appeared beating slowly down from the north. She must have turned into the coast too soon. Together we crossed the line, north of the ancient castle at the mouth of Bayonna's harbor. The gun boomed, we had finished at 0539.

We were greeted by a boat loaded with friendly Spanish officials who welcomed us to Bayonna. As we motored into the misty harbor lit by the early rising sun, the old town came into view nestling among the surrounding mountains. Above, on the point, loomed the castle, now a hotel. At its foot was the Club Montereal de Yates, the yacht club. To our surprise only half the racing fleet appeared to be anchored or lying alongside the club dock. Old friends welcomed us and caught our lines. It appeared that we were the first to have finished in Class D. Despite the early hour, all hands had a stiff drink. A huge breakfast followed to which we invited Mrs. German Freres. She was waiting on the dock for her husband, the Argentine owner and designer of *Fjord VI*. We had to allow him two hours of time. When he finished an hour and three quarters later we were then second. Four hours later Sonny Neff in *Prim*, a fiberglass version of the old Owens Cutter, and the next to the smallest boat in the fleet, came in to save his time on us. Thus, *Challenge* finished third in Class D and sixth in the fleet.

At Villagarcia in the Ria de Arosa, south of Cape Finistere, *Challenge* left the fleet to sail northward. During the three day crossing of the Bay of Biscay, another gale was encountered. Two delightful days were spent in St. Peters Port on Guernsey in the Channel Islands. Sailing thence up Channel through the Straights of Dover we lay overnight, first at Boulogne, and then at Ostende. Both are charming ports at the mouths of rivers. On August 5 we arrived at the Hook of Holland to proceed up the busy waterway some fifteen miles inland to the huge port of Rotterdam. There we were given a berth at the Royal Maas Yacht Club which is located in a lovely wooded park in the heart of the city. The crew spent a busy day unstepping the masts and preparing *Challenge* for shipping on the deck of a steamer. All hands went their ways, and *Challenge* safely arrived back in Boston several weeks later. So ended an exciting voyage of several thousand miles accomplished without any major difficulty or untoward event.



Peggy, who had arrived before us, joined the crew for the rest of the voyage. After several days and a gay round of parties with our genial Spanish hosts, *Challenge* cruised northward in company with 16 other vessels of the Cruising Club of America. The coast is very rough and deeply indented. The mountains rise up to 3500 feet directly out of the sea. On the islands and in the bays are beautiful deserted sand beaches lying below the volcanic cliffs. On these shores, with the other participating crews, we swam and landed to climb the rocky hills. There were several rendezvous at which we were joined by the vessels of our Spanish hosts and by members of the Irish Cruising Club and the Royal Cruising Club who had come from Ireland and England in their own boats.

Sailing the Irish Coast

by Brian C. Dalton, LRCPI, LRCSI

Assistant Professor of Anesthesia

The coast of Ireland, particularly its western Atlantic carved shore, provides majestic cruising scenery and a drenching refreshment in unspoiled living. Fundamentally, most sailors seek the challenging contact between man and nature in an increasingly mechanical civilization. However, the modern cruising sailor relies on engine, radio, and electronic navigation aids for safety during excessive weather and to assist passages when available time is limited. Accordingly, for those who wish to enjoy life a little longer, the Irish seaboard is adequately served by a system of buoys, lights, a chain of marine radio beacons, and convenient weather reports from the state operated Radio Eireann. Because most cruising men enrich their enjoyment by knowledge of local history and adaptation to the ways of the "natives" ashore, it is well to know that history in Ireland depends upon a strong oral tradition that developed in compensation for the early destruction of archives and records, and the later suppression of education.

The Irish have been sailing since the earliest settlers arrived by boat more than 6,000 years B.C., which is considerably later than the separation of the land from the continental land mass. Others to "cruise" this coast and color history where the Vikings, who plundered and later established the estuary cities of Dublin, Wexford, Waterford, Cork, and Limerick. The later landing of the Normans in 1169 spearheaded almost 700 years of varying English domination inter-

spersed by French and Spanish fleets assisting the Irish cause. Ships of the Spanish Armada were wrecked on the west coast, but the Spanish contribution to the genetic injection inherent with the islands successive invasions has curiously been romantically exaggerated. Perhaps in a culture with legendary hospitality, shipwrecked sailors of friendly kingdoms fared better than marauders and planters.

The many ruins of lookout posts, fortifications and castles visible by boat are ample reminders of the country's grim and tragic past. So much so that an historical description of the coast during a circumnavigation of Ireland would provide almost all the significant information needed. The rich land

that drew the conquerer, the poor land that could not sustain the conquered, the ports that during the potato famine exported wheat to pay absentee landlords as efficiently as hungry emigrants to the New World in "coffin ships," are in the seascape. The mist and gloom are pierced by shafts of sunlight and sometimes by bolts of lightning. When western civilization became endangered in the Dark Ages, scholars retreated to isolated refuges such as Skelig Michael, a seven hundred foot high rocky perch seven miles off the county Kerry coast. The turbulent Atlantic allows landing on this island only a few days a year, so that the beehive-shaped stone buildings of the 8th century monastic settlement are rarely visited. Farther up the western

A currach about to be launched at Inisheer, Aran Islands.



coast, the castle of the blood thirsty pirate queen Grannuale, can be visited more easily on Clair Island in county Mayo. Farther still, at the head of Sligo Bay, is the prominent "Fair Ben Bulbens Head," the flat-topped mountain beloved by William Yeats, the poet, and his brother Jack, the painter. The east coast is not without its literary littoral for, guarding Dublin Bay, is a certain Martello tower, one of a line of sight chain built in anticipation of a Napoleonic invasion. This tower is well described in the opening pages of *Ulysses* because Joyce himself lived there with friends, all of whom were characterized in the story.

The termination of British rule for all but six northern counties in 1922 was assisted by the exploits of several Irish yachtsmen importantly supported by wealthy Anglo-Irish families and enlightened English liberals. In 1914, Erskine Childers, author of the captivating cloak and dagger yachting adventure "The Riddle of the Sands," took a leading role in a spectacular gunrunning cruise. Curiously the fiction preceded the fact by eleven years with many points of similarity. On board *Asgard* for the gunrunning to Howth near Dublin, were Childers' Bostonian wife, the former Molly Osgood; the honorable Mary Rice, daughter of Irish peer Lord Monteagle; and English Captain, (later Brigadier General) Gordon Shephard, on leave from the Royal Flying Corps; and two Donegal fishermen named Pat McGinley and Charles Duggan. After a secret rendezvous with a German tug off the Belgian coast, the guns were handed down into the 49-foot ketch until it was low in the water which, however, did not draw the attention of the British Fleet in whose company they found themselves during the return journey. Also sharing the tugs' contraband was *Kelpie* skippered by Conor O'Brien, who years later sailed round the world and wrote a classic account. O'Brien, being more outspoken and suspect by the authorities, did not attempt an Irish landing of the guns. Instead, in the middle of the Irish Sea, he transferred his guns to the *Chotah*,

under the command of Sir Thomas Myles. Sir Thomas, a prominent Irish surgeon, was known to spend his weekends at sea and his return from a rendezvous with the *Kelpie* was therefore not suspect. The fact that he bore the title, Surgeon to the King in Ireland also undoubtedly helped. These guns were used in the Easter Rebellion of 1916 which subsequently led to the signing of the treaty in 1922. Today, despite the impression created by the news media reporting the strife in one small part of Northern Ireland, the rest of the country is peaceful and gradually establishing modest prosperity.

Although several local yacht designs are to be seen among the racing fleets about Dublin and Belfast, two traditional work boats both found on the western coast deserve special mention. One is the Curragh, a coracle originally made with animal skins stretched over a wooden frame whose design has survived from Bronze Age times because of its excellent handling in heavy seas. These fishermen's boats are constructed without metal and have oars that mount the gunwale on wooden thole pins.

The other distinctive class is the Galway hooker, a gaff-headed cutter which served the larger offshore islands especially Innisbofin and the Arans. The term "old hooker" is associated with a well-loved and easy going craft. Not surprisingly, due to emigration from the poor western shore, the Galway hooker's lines were to be seen among the early Boston fishing vessels. Both curragh and hooker are immortalized in verse, particularly in the poems of skipper Richard Murphy who describes this coast so well.

Encased in mirage, steam on the water
Loosely we coast where hideous rocks jag.
An acropolis of cormorants, an extinct
Volcano where spiders spin, a purgatory
Guarded by hags and bristled with breakers.
(from "Sailing to an Island")

Irish yachtsmen may be forgiven for boasting of possessing the oldest yacht club in the world, the Royal Cork Yacht Club. Founded in 1720 as the Water Club of the Harbour of Cork, it is royal because of a charter granted by William IV and the present membership, which is representative of all shades of political opinion, would no more dream of striking out the prefix than would the French destroy their Roman remains. To the present day the senior club official is entitled Admiral. In former days it seems that judges had a thirst that belies or perhaps explains the alleged sobriety of the profession for, in the club's ancient rules, rule number 3 states:

"Resolved, That no Admiral presume to bring more than two dozen of wine to his treat; for it has always been deemed a breach of the ancient rules and constitutions of the Club, except when my Lords the judges are invited."

In 1969 fleets from the Cruising Club of America, (who had sailed from Newport R.I.) from the English Royal Cruising Club, and from the Irish Cruising Club gathered in Cork to celebrate the club's 250th anniversary. The joint cruise in company of the southwestern coast which followed lived up to the ancient standards of the club and provided many visitors with their first enjoyment of these parts.

In conclusion, it may be appropriate to comment that some Harvard Medical Alumni including Richard Warren '34, Francis D. Moore '39, George Clowes '41, Frank Wheelock '43A and Jon Rohde '66 have already discovered the Irish Coast. Dr. Warren in *Phalarope*, Dr. Clowes in *Shearwater* and Dr. Wheelock in *Flying Fish* perhaps enjoyed it most because they each sailed across the Atlantic to make this landfall. Dr. Warren described the coast as like a cocktail "one part Mount Desert Island, one part Newfoundland Coast, a dash of Norwegian Mountain and a squeeze of Irish history; serve at the temperature of the Irish sea (56°F)." Oral tradition suggests that a measure of that distinctive Irish Whiskey should be added.

Oh, Those British Virgins!

by John R. Brooks '43B

We went to the British Virgins 480 years after Columbus. He passed by in 1793 on his second voyage to the West Indies. Nobody knows whether or not he went through the famous channel later named for Sir Francis Drake, but he named these islands Las Virgines after St. Ursula and her hapless 11,000 put to death by the Huns. Today, the legend of this saint is commemorated on the British Virgins' flag, and traditionally the official government boat is named for her.

Situated some 80 miles east of Puerto Rico, this cluster of over 30 islands were first inhabited by the Arawaks who came from South America. These peaceful Indians were in turn followed by fierce Caribs not unknown for cannibalism. Columbus met these people and the Spaniards used them for labor. Ponce de Leon came to Puerto Rico in 1508 and found the Indians fierce and warlike. The English adventurers, Sir Sebastian Cabot and Sir

Thomas Pert, first visited the British Virgins in 1517 on their way home from exploring Brazilian waters. At that time, there were horrible reports of cannibalism but this did not prevent venturesome Dutch, French, and other English explorers from joining together in the Sir Francis Drake channel and sailing past Virgin Gorda and Tortola.

Sir John Hawkins came in 1542 with his first cargo of slaves for Hispaniola and returned again in 1568 with a young captain named Sir Francis Drake. In 1585, Drake came through the channel now named for him, on his way to Santo Domingo, Cuba, Florida, and eventually, Virginia.

The Dutch developed the first permanent settlement of Tortola in 1648. The Dutch West India Company, established in 1621, brought to the Islands a knowledge of sugar making from Brazil. Tortola was later captured from the Dutch by the English, lost for a while to the French, and then recaptured by the English in 1672. Meanwhile, the Danes took over St. Thomas and St. Johns across the narrowest part of Drake's Channel. For the Virgins, the 18th century meant sugar, although cotton had been the first staple crop. The census on Tortola and Virgin Gorda increased and the triangle trade developed. Sugar went to England; rum was for home consumption or was shipped to the North American colonies with molasses which was used to keep the New England distilleries going. North American rum then went to Africa to be traded for slaves; and slaves came to the Indies to help

grow more cane to make more sugar, rum, and molasses. Tortola and Virgin Gorda flourished on this infamous trade. Plantation owners became wealthy as sugar planters, and slave labor was the backbone of the system until after the emancipation in 1834.

The Quakers came to the Virgin Islands in the middle 18th century, many settling on Tortola at Fat Hog Bay. Quaker names such as Pickering, Lettsom, Nottingham, Hodge, and Thornton appear in the history of the British Islands. Dr. John Lettsom was the famous Quaker Friend who was born in 1744 on little Jost Van Dyke Island off Tortola. His fame rests upon a humorous lyric: "I, John Lettsom; Blisters, Bleeds, and Sweats 'em. If, after that, they please to die; I, John Lettsom." He and one of his close friends, William Thornton, became famous for their part on behalf of emancipation of the slaves. Abolition of the slave trade took place in 1807, but there was a lag in emancipation in the Virgin Islands until 1834. At that time, one wealthy planter, Arthur Williams Hodge, was tried for murdering one of his slaves, Prosper, after the slave let a mango fall from a tree he was posted to watch. Hodge's trial brought to a head the entire slavery issue and he was later hanged behind the jail in Roadtown. In 1853, there was a revolt in Roadtown following the imposition of a cattle tax, after which the blacks destroyed the cane fields and the whites fled.

Leinster Bay

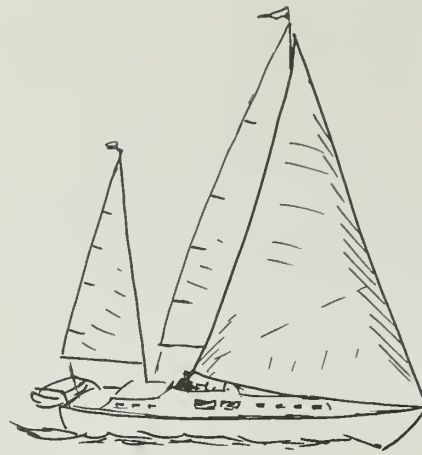


Rejuvenation began in 1900 and today, Tortola and the British Virgins depend upon an industry of livestock and tourism. Sugar and cotton have almost gone (although there is one active local industry — making rum) and the true natives live on rock farming and goats.

We flew to Tortola in early March, 1973. Having always wanted to go, I had talked my wife and four friends into an eight-day cruise. I did my homework and we decided to concentrate on the British Virgin Isles and leave St. Thomas and St. Croix alone, since these islands have become quite commercial and in recent years, there has been growing unrest between the white and black population. At any rate, St. Croix is down wind and we did not want to bother to fight the eastern trades to return to Drake Channel.

In San Juan, the six of us climbed into a 1935 Beachcraft plane owned by the St. Thomas Air-taxi company and fought for air in the cabin as we waited the arrival of Hernandez. Hernandez was our pilot; coatless, tieless, relaxed. He wormed past us into the pilot's seat, started up the two engines and we taxied out to the runway. That area of the plane engine which I believe is called the cowling (at least it was in Lindbergh's plane and this was its contemporary) shook like the back panel of a bus on a bumpy road. I watched the altimeter. It seemed to hover at 3,000 feet but a quick recollection of my brief research into the topography of the area gave me reassurance; I remembered that the highest point of land in the Virgin Islands is 2,000 feet. St. Thomas appeared to our right before long; and to our left appeared oil spattering out from underneath that quivering cowling.

I tried to get Hernandez's attention but he simply waved back at me. The engine noise was deafening but at the same time, comforting. Moments later, there was a slight pause or drop in engine noise and we noticed that Hernandez quickly flipped on another gas tank. He turned to ask us why we were all so serious and said that he had just



put in a new elastic for the propellers. The view as we approached Tortola with Jost Van Dyke Island to our left, St. John to our right, and Sopers Hole beneath us, was nothing short of magnificent. Great and Little Thatch Islands rose up so steeply from the sea we could almost touch them. Sopers Hole on the western end of Tortola was the first settlement and famous as a hideout for pirates. My mind went back to thoughts of Captains Avery and Blackbeard; one could see how well protected a pirate's ship could be, ready to pounce out from behind an island to attack a merchant ship coming through the Francis Drake Channel. We passed over Roadtown, the main port, nestled at the base of steep-rising, fertile, volcanic hills and landed at the Beef Island Airport. This island is connected to Tortola by the Queen Elizabeth Bridge. Queen Elizabeth II and Philip, visited Tortola for one jubilant, never-to-be-forgotten day, in 1966. It was the first visit of a monarch to this part of the British Kingdom and the \$85,000 steel and concrete, one lane bridge that leads to the airport on Beef Island was dedicated that day.

Spirits were high as we said goodbye to Hernandez and watched our plane take off for St. Thomas. We went thru a relaxed form of customs office ("Any thing in your bags?"; "No."; "OK") and set off for the Inn where we were to stay the first night. We were in British land, driving on the left side of the road, but we tipped our taxi driver with American money for that is the

currency of the British Virgin Isles. At the Inn overlooking Sir Francis Drake channel, and the islands on the southern side of the four-mile wide channel, we ate up the view. The wind blew slightly south of east as it does at this time of year and I would guess at approximately 20-25 knots. The day was clear, crystal clear. White caps were plentiful and tropic vegetation abounded. The islands had had little rain and the water supply (roof to cistern) was down a bit but no one seemed worried. You don't worry down there.

We had a charter arranged with Caribbean Sailing Yachts Ltd. that has a fleet of some 80 boats distributed between the Bahamas, the Virgins and the other Caribbean Islands to the south. We were to spend the night at the Inn and then early in the morning go with our luggage to nearby Maya Cove to receive our sailing instructions and go aboard. Morning broke as clear as the preceding day; the winds still just south of east and at 22 knots. The view across the channel to Cooper, Salt, and Ginger Islands, to the western end of Virgin Gorda, to Peter Island and then to the west, St. John, was indescribably beautiful. Our boat was a Carib 41, beamy, modern underbody, fiberglass, and comfortable.

The charterer had shortened the mast 10' we were told, and all large sails had been removed, so she needed lots of wind to make her go. These boats are owned by individuals who charter them out to the Caribbean Sailing Yachts Ltd. in return for a rather handsome price and the opportunity to use the boat themselves more or less whenever they wish. Our boat had a center cockpit, a stateroom aft and forward, and double bunk amid-ship. I knew the long bunks were aft and felt the cleverest way to handle the bunk assignment was to say little, feeling that other members of the crew would realize I was the tallest member of the crew, had done most of the organizing of the trip, and being gentlemen, would probably offer this cabin to my wife and myself. This is the way the cards fell.

healthy, bearded, tanned members of the Caribbean Sailing Yacht's Ltd. greeted us and proceeded to indoctrinate us into the geography of the area, the boat, and its supplies. The ladies went to check the provisions while the men had a half-hour lecture on various harbors and nautical dangers. There were certain places we were told we could not go — our draft was 6' 3"! As we sat there in the shade of the loading area, we were invited to have drinks. Beer was .50c a small glass; gin, rum and whiskey were free.

For those who have sailed the Maine coast, been outside Nova Scotia, across the Bay of Fundy, or the Gulf-stream, the Virgins can only be described as nautically safe. The distance across Sir Francis Drake channel is less than five miles; there is never any fog; occasionally there is rain and very rarely a rain squall. The water is crystal clear and usually one can see the coral heads from the bow.

We went aboard and headed out of Maya Cove into Drake Channel. It was still blowing 22-23 knots and the sun was lovely, warm, and brilliant. There were a few sails and the lovely high islands that formed the channel were green and handsome — pure bliss. We decided to go to Norman's Island first. It's also called Treasure Island locally because, naturally, it once had "treasure." Some people (and I believe them) claim that Norman Island is Robert Lewis Stevenson's Treasure Island and are still digging for the treasure. On the southwest edge of the island near a harbor called The Bight, are two coves into which a dinghy can be taken and we did. Passing into a dark, water-filled cavern for approximately 50 yards or more we explored a treasure cave. Allegedly, Mr. Flemming boarded his treasure there from the depths of the cave. It was too crowded in the Bight for us, so we moved to the northern side of the island and dropped anchor in an isolated cove for our first evening. The Caribbean Sailing Yachts Ltd. had done an excellent job with provisions, our girls did the rest, and we did not suffer.



The chart of the voyage.

When you get outside Drake channel it can be rough, as you are feeling the effects of wind and wave coming from the open Atlantic for miles away. That next day we sailed into the Atlantic as we headed east for Virgin Gorda. Outside the channel we saw countless flying fish and the frigate birds and it was here that some of our party made contributions to the sea. The small islands that form the southern edge of Drake's channel are Salt, Cooper, and Ginger. They all have steep-rising cliffs coming right out of the ocean, and are surrounded by beautifully clear water and Pelicans voraciously working the shoreline. We went between Salt and Cooper and headed up the channel towards Mosquito Island and Gorda Sound. But first we had to ogle the compound at Little Dix Bay where Lawrence Rockefeller has his fancy "plantation." Then we went through a coral reef to Savannah Bay for snorkeling. Anchoring about 20 yards off the beach, we jumped overboard and swam ashore. What a sensation — warm, crystal clear, beach lovely, sandy, clean and free of humanity. We began our snorkeling activities. I've never enjoyed putting my head under water any length of time and my first experience with snorkeling was no success. Most of Savannah

Bay went into my nose and sinuses and I called it quits for the day. The rest of that day every time I leaned over I was greeted by a return from Savannah Bay. My wife and the others took to snorkeling like old-timers and although later I got to the point where I could do minor snorkeling of my own it was not because I was the best snorkeler that they called me "Snork."

You have to get into the spirit of things as you sail down Sir Francis Drake channel against the easterly breeze on your way to Gorda Sound. It's not hard to envisage a slave laden bark coming over the horizon, or a pirate ship hidden in a cove coming out behind one of the Dog Islands (Seal Dog, West Dog, Great Dog and George Dog). Off in the distance, lying low for a Virgin Island, is Anegada Island and its surrounding shoals, the site of over 300 vessel wrecks, drawn onto the reefs by some mysterious northerly flowing current. Sailing into Gorda Sound we fancied ourselves as Sir Francis Drake. We found a lovely sandy cove on the western shore of Prickly Pear Island, dropped the hook, and went ashore. Exploring on these islands can be difficult; the brush is thick and prickly. The Prickly Pear is a cactus-like shrub with large green

thick prickly "leaves." Bugs were plentiful on Prickly Pear, but the wind continued to blow and off shore at the anchorage we were never disturbed. That night we brought out the first of a long series of incredible meals, set up our grill over the transom and had steaks. Across the bay in Gun Greek we could see the native houses, a far cry from the luxury and comfort of such nearby Inns as the Bitter End, situated at the end of Gorda Sound on Virgin Gorda Island where many cruising vessels were anchored. We went ashore in the morning to find out about the Islands lying off-shore, Necker and Eustatia, and were pleased to find that we could explore these islands and anchor off their beaches. We saw those sugar eaters, the tiny bananaquit birds. Nighttime in the Virgin Islands is lovely. Cool enough for a blanket, a bit too windy perhaps at times with minor rain squalls and flurries of wind that tend to pick up the halyards and slap a bit; but the bottom gave good holding for our plow anchor and we slept.

The following morning we beat out the channel to Virgin Sound and Necker Island. The pathway into the beach off Necker Island is narrow, precarious, and only to be attempted in relatively quiet weather. We anchored bow and stern off the beach perhaps 20 yards and split into two parties; one to explore the island, and the other to snorkel off the reefs. The outer side of Necker Island faces the Atlantic and as we walked along the beach we looked up at a high cliff inland and saw a proud ram standing alone looking out to sea.



Sugar Garden Bay

We scrambled up the hill to join him, passing lots of cactuses with fascinating red flowery buds jutting out from the tops of each plant. Gradually we made our way to the highest point where the ram had been standing. He had disappeared, but looking out we could see the ocean tumbling over the reefs that extend out from Anegada in ominous fashion and could almost see and feel the 300 vessels wrecked on those shoals. There is said to be good snorkeling around Anegada but we didn't get there. It was off limits.

We went around Necker Island on foot, came back to the other side and joined our snorkeling friends who had seen blue-tangs, butterfly fish (with an eye in the tail) sargent majors, snappers, parrot fish, queer triangular shaped fish, and long eel-like trumpet fish. We raised our anchor, headed back thru the narrow channel, sailed thru Eustatia Sound and back to our anchorage off Prickly Pear Island.

The following day we set off to retrace our steps down the eastern end of Francis Drake channel and were greeted by a rain squall and winds of 35 knots and gusts that took us quickly down the channel thru the Dog Islands and over to Fallen Jerusalem and the Baths. This tourist attraction, has high massive boulders leaning on each other and sheltering a fascinating ocean pool. But the Baths seem to have become a bit too commercial and we had to fight our way thru the crowd that afternoon to see the attractions. Some of our company went snorkeling again at the ocean edge and they announced that it was the best in all the Virgin Islands.

Across the channel that afternoon we passed Beef Island, past Trellis Bay, past Marina Cay (with its famous Inn) and out between Little and Great Camanoe Island into the open ocean north of Tortola. Then began a lovely sail down the North side of Tortola between Guano Island and Tortola, past high green hills interspersed with beautiful white beaches, the wind blowing about 25 and all downwind. Wow!

Our destination was Jost Van Dyke Island and we arrived late in the day to find a large number of fellow cruisers. Jost Van Dyke, a relic of the Danish occupation, is a simple, essentially untouched island, except for a few natives and "Foxy." Back from and at one end of the beach a short distance was the church, surrounded by a small, poorly-kept graveyard, a school, and a few rather primitive plain buildings for the natives. On the other end of the beach was a small restaurant and bar run by "Foxy," a black native famous in these parts. That night we went ashore and were entertained at Foxy's by a native band, and savored the atmosphere.

The following morning was bright and clear. There was still 22 knots of easterly wind but we were well protected in the harbor. We returned ashore to pay our respects to the customs house and to visit the local school. The children seemed healthy and flashed fine white teeth in apparent good repair. There were two

teachers, both black, highly agreeable, and wonderfully eager to tell us what they were doing with the children. We talked to one or two of the children, but their English was scarcely understandable. When I asked the teachers what the children were saying, they assured me that they were only speaking gibberish to fool us; we smiled and the children giggled. But even so, when speaking, their words had a locally dialectical flavor. Jost Van Dyke has an old ruined Fort and some places with fascinating names: Pull and De Damm' Point; Dim Don Point and Boo Point.

That day we sailed to Sandy Cay, another Rockefeller stronghold, and had a glorious time exploring the islands, snorkeling, and relaxing. In the cliffs on the seaward side we found two small young tropic birds in a nest with their protective mother circling around in the updrafts off-shore. We sailed on to Cane Garden Bay, where Mt. Sage rises 1700 feet behind the harbor. We hired a car and driver and went up the rocky-rugged road in a downpour. Leaving the car we climbed to the rain forest, saw wonderfully fertile, green foliage, a few mules on some rocky paths, and a view of the ocean and islands below us.

We visited the local rum distillery in Cane Garden Bay, where the large vats with the sugar cane mash were "working." "Dead" mash is placed in somewhat dirty copper potstills and drains through a basement outlet from the distillery delivering crude rum to another big barrel. Some members of our crew decided to buy some of this rum. Our guide and apparently the manager of the distillery, went over to the corner of this blackened room, pulled out a pepsi-cola bottle and some local ginger-ale type bottle, stepped over to the barrel, put a plastic tube in his mouth, sucked and started the siphon bringing rum from the vat. He handed out labels for each bottle. I was glad that I had not offered to consume any of this produce but it was an interesting process to see and we departed with the rum, along the beach, in the rain, back to the boat.

Late that day we sailed down past the west end of Tortola between Little and Great Thatch Islands, across the western end of Drake's channel to Leinster Bay. This is a lovely spot; good for snorkeling and exploring. We went ashore in the morning, climbed through the brambles and prickles to inspect the ruins of an old plantation that stood high on the hill in a good position to spot incoming and outgoing ship traffic up the Sir Francis Drake channel. There was an old sugar cane grinding mill there too, presently occupied by a small herd of cattle who seemed to wind their way in and out of the old buildings as if they owned them.

We cleared customs in Cruz Bay the following day and returned to Rockefeller's famous resort, Caneel Bay, where we spruced up for dinner ashore; but the meal was no better than the meals the girls had served us on board our boat.

Still the wind blew. We snorkeled again in famous Trunk Bay and then beat out the narrows against the current and a 30-knot breeze that swept down Drake's channel. We tore our genoa that day and tried to patch it to no avail, but we limped into Hurricane Hole on the far side of St. John and spent the night in Round Bay, in the American Virgins.

Roadtown is the "capital" of Tortola and we felt that we should see it so we powered across the channel the next day to reconnoiter, picked

up a new genoa and then spent the last full day of our cruise sailing back and forth in the channel. We circumnavigated Dead (Man's) Chest Island and its name tells the story. Apparently the pirate chief, to punish 15 men, placed them on Dead Chest Island to see if they would survive and therefore "15 men on a dead man's chest — yo ho ho and a bottle of rum."

The island is high, with steep cliffs running to the shore from which it would be difficult to escape. It was a sort of Virgin Island Alcatraz. We spent the rest of the day swimming in Dead Man's Bay, one of the most beautiful in the area. We walked to the top of the southern ridge of Peter Island to look over St. John, Tortola, Virgin Gorda, and the rest of the Virgin Islands. It was a glorious view. Peter Island has a yachting facility and hotel built by a Norwegian ship owner named Smedvig, said to be the Onassis of Norway. We decided to splurge on the final night, so we anchored off the marina and went ashore to the Peter Island Yacht Club for dinner.

We said goodbye to Drake channel the following day and got a final look at Virgin, Ginger, Cooper, Salt, and Peter islands. We waved a fond farewell to Virgin Gorda, Fallen Jerusalem, and Tortola, best of all. We bumped over the road to the Beef Island airport, checked into the "terminal building" with our gear, were edged out of the building by a few exploring goats, and took off for San Juan just as a few pelicans dove into the water for a fishy meal.



Voyage to Enchantment

by George Nichols, Jr., M.D.
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Sailing ships began to give way to steamers as a means of travel and commerce a century ago, the last survivors losing their economic viability during World War II. Since then sailing has been kept alive solely as a means of enjoyment, generally (and rightly) regarded, when oceangoing ships are involved, as available only to the rich or idle. The old virtues of the deep-sea sailor — self reliance, resourcefulness, independence, tolerance — must be learned elsewhere or, if they have been found at sea under sail, their discovery is used by most to rationalize, post-hoc, the expenditure of time, money, and effort on a venture which was really undertaken for fun.

The American Sailing Education Association (SEA for short) was born several years ago out of the notion that sailing ships and the skills needed to operate them deserved a better niche in contemporary American society than that of mere plaything and sport. Not only were the traditions worthy of preservation but the potential usefulness of sail, it was felt, had been lost sight of in our rush for speed and promptness. In short, it was believed that there are certain kinds of work which can be uniquely well done by sailing ships; that there are lessons about oneself and one's relation to others and the environment to be learned from experience at sea under sail which are not found elsewhere; and, were opportunities available to go to sea in small working ships, the demand for the experience from people of all ages and walks of life would be sufficient to provide crews for a number of vessels.

Unlike most romantic dreams this one came true. Biological oceanography was selected as the work, funds were collected, a ship was purchased, equipped, staffed with sailors and scientists, specific oceanographic projects were solicited and "apprentices" interested in and able to pay for the "experiential" education of going to sea in a sailing oceanographic research vessel were sought by lectures in clubs and schools, newspaper articles and open-house tours of the ship in various ports.

The upshot was that the research schooner *Westward* sailed on her first voyage from San Diego on January 6, 1972 bound for the Galapagos Islands, the Panama Canal, and Puerto Rico. Aboard were 15 apprentices, 12 boys and three girls ranging from 17 to 24 years of age, a professional (paid) crew of six, a naturalist-teacher, a volunteer physician, two writers, one the publisher of a national magazine and one a free-lance reporter, and the author who went along as general organizer-observer and representative of the Trustees for the 30 day-passage to the Galapagos, "Los Enchantadas" as the Spaniards named them in the 16th century. While both writers have published accounts of the voyage^{1,2} so that the general outlines of the adventure may be known to some, their responsibilities and their bias were inevitably different than mine. Therefore, it seems worth while to describe, even at the risk of being repetitious, the "experiential" education of someone deeply involved in an effort to re-establish sailing ships as working vessels, give young people an opportunity to go

to sea in them on long voyages, and generally to make sailing "meaningful."

Sailing day is always difficult — nothing is ever completely done and the number of small details which must be completed before departure is directly proportional to the length of the trip and the size of the crew. When leaving for a two-month voyage with a crew of 26, the problem reaches stupendous proportions! The only solution is to name a time for departure and stick to it. Therefore, at 3 p.m., on that quiet sunny afternoon, sailing orders went forward: "Let go dock lines one, two, and four — Hold number 3!" the captain called. Then: "Astern 400 turns" was his order to the engineer. The auxiliary diesel thumped to life and *Westward* backed against the tug of our remaining dock line swinging her bow out into the harbor. A few moments later as parents and friends waved, and last minute purchases were tossed aboard the orders: "Stop engine, Let go number 3," and "Ahead 400," moved her away from the dock and we were off. Not quite "off" however, because the doctor and an apprentice with an abscessed tooth had not yet returned from the dentist's office, but "off" enough to sever that critical connection with the land.

At sea the ship is the world, the crew its population. The complexities and problems of the land are its own and are left behind when the last dockline comes aboard. New problems arise which are sea and ship related but for the first hours after sailing, the ship is at peace . . . for everyone is still equal. No one has succeeded or failed. No one has yet espoused a view, made friends or enemies, made his power or weakness, his knowledge or ignorance felt.

So, the hour or two spent drifting on windless San Diego Bay waiting for the doctor and his patient were peaceful. Apprentices and crew began to settle their things and themselves into their assigned bunks, and roles, for the long passage ahead. People began to look at each other with new interest — quiet conversations sprang up. . . . “I’m from Cohasset, where do you live?” . . . “Very new — I’ve never sailed before” . . . “Sure, I will help anytime, just let me know.” The stresses of organization and departure — and there had been plenty — faded quickly as the ship’s company began to turn inward to itself and integrate into a crew.

Somehow the tone of a whole voyage is often set by those first hours — gentle or rough, peaceful or stressed, the crew happily unified or sadly divided — one seems to know how it will be very soon after the beginning. By the time the doctor and his patient were back, and the ship was sailing slowly out the channel into the sunset, it was clear that this voyage was going to be peaceful; the crew would be united in the excitement of making the passage, its sailing and its scientific missions a success.

As if to welcome us into our new world the ocean put on a show for us that evening that we all still marvel about. Phosphorescence is at a peak off the southern California coast in early January, and the squid run then too. That evening there was no wind and no moon. As the ship forged ahead under power, the whole sea lit up ahead as the squid fleeing her bow wave left wriggling wakes of brilliant phos-



“Day after day we sailed . . .”

phorescence in the water, a silent, shouting riot of moving lights. As if this were not enough, a school of porpoises played under the bow, each swimming form outlined in a skin of fire. Everyone lined the rails for hours that night, ignoring the chill evening mist, to watch the spectacle with awe and wonder. Not much was said but as people gradually began slipping quietly below to sleep, the sense of unity that had begun to appear during the afternoon became established — a sense of oneness and belonging which many commented about afterwards as an important and highly valuable aspect of life aboard.

Next morning the captain met with the staff — the paid crew and volunteers — to go over the general plan of the voyage and assign specific tasks. We were a polyglot bunch that had come together in our common desire to add meaning to the pleasures of sailing. The captain was an ex-high school teacher who had gone “salty” several years before. Since then he had been all over the Pacific and had been skipper of *Westward* on an extended voyage through the Central Pacific basin the year before. His wife, the cook, trained as a musician in her native New Zealand and London, had met him while teaching in Fiji. The bosun (first mate) started life

as a successful veterinarian but turned to sailing when his physician advised a less strenuous life. Since then, he and his wife had completed three circumnavigations of the world in their own boat including one of the Antarctic Continent — a feat never before accomplished under sail. The engineer, proud possessor of a Harvard degree in economics, received his training in sail in yachts between New York and Halifax and in engines during three years in the Army and a stint as pit man for a sports car racing friend. A second mate with a zoology degree and a year as a porpoise trainer and a half-French, half-Norwegian volcanologist-scientist-teacher, completed the roster of professionals. The volunteer group was equally diverse. The doctor had heard of us by chance while finishing his medical studies in Geneva and had volunteered (sight unseen) by mail. He wanted to round out his salt water sailing experience (obtained in school in Brittany in view of his Swiss nationality) before settling down to a life in ophthalmology. The publisher came because of a long-standing desire to run a sailing training ship in which young people could learn to value themselves, other cultures, and their environment — a desire which lay behind the establishment of his rapidly growing empire. His extensive sailing experience was gained on Atlantic waters in yacht delivery and the charter-boat business. Somewhat similar motives had brought our lady free-lance reporter aboard. She, too, had sailed thousands of miles in yacht deliveries from Puerto Rico to Tahiti. Faced with all that experience, I felt pretty humble. Twenty years of varied medical school teaching, even combined with 40 years of coastal sailing and a few ocean races, somehow didn’t seem very significant qualifications anymore!

A number of scientific projects were to be accomplished. These included taking water samples for cesium fallout and microscopic particle studies for the Scripps Oceanographic Institute; sampling and photographing, by means of free-swimming buoys, a particular area of bottom to aid the Kennecott

Exploration Company in a search for manganese nodules; and collecting plankton twice daily, at noon and midnight, at the surface and 100 meters down for scientists at the Woods Hole Oceanographic Institute interested in proving that the distribution of certain species of mollusks on both sides of the Pacific and Atlantic basins resulted from the drift of their pelagic larval forms in the great ocean currents. These currents sweep eastward in the high latitudes driven by the prevailing Westerlies and westward again in the equatorial region urged on by the Trades to form huge cycles of water flow in both the Northern and Southern Hemispheres. Collections of volcanic rocks from the Galapagos themselves and of littoral (in shore) benthic (bottom dwelling) animals on both sides of the Isthmus of Panama to see what effects a sea level canal might have on the fauna of each region completed the list.

Of these, the plankton work had the greatest impact on life aboard — not only because it was with us all of the time but because each collection required so much ship and sail handling. Surface collections required 20 minutes at no more than two knots speed and the deeper collections required that the ship be virtually at a standstill. Proceeding under engine, these conditions are relatively easy to arrange, but under sail, the problem becomes much more involved. Sail must be reduced and the ship hove-to. The latter proved to be best accomplished under backed fore staysail and mainsail only. This meant dropping and furling two jibs, the fisherman staysail, and the main staysail. The combined lessons in practical seamanship and in the arduous nature of routine oceanographic work generated by these exercises molded apprentices and ships officers into an effective, efficient set of seamen in a way no number of “con-trived” drills could ever have done.

At the same meeting, a number of other jobs were assigned for better or worse according to the talent and interests of the members of the group. The teaching of marine

geology went to our volcanologist-scientist as did the supervision of the overall collecting program; our second mate's interest in marine mammals made him a “natural” to lecture on the fauna of the islands and of the sea we were to cross reaching them. The cook would teach cooking and music; the engineer the practicals of diesel maintenance and operation; the doctor first-aid; the publisher the theory, and the author the practice of celestial navigation — the latter assignment developing paripassu when I volunteered to become navigator for the passage. In addition, our bosun, a proper “ship's husband” needed help with various maintenance projects; painting, replacement of the ratlines (short lengths of rope tied across the stays on the masts to form a ladder) many of which were rotten and unsafe, sail repair, and most important of all, help in making a new square-sail yard out of a telephone pole purchased for the purpose to replace the yard broken in an unfortunate accident two days before departure.

The track along which the ship was proceeding brought us to Guadalupe Island 200 miles SSW of San Diego at dawn a day later. The island is high, 2-3,000 feet and very steep — a true volcanic peak rising sheer and solitary from the ocean floor. That morning, looming out of the west with its head in the overcast and its feet in a wreath of foaming surf, it looked forbidding and lonely. Yet, as our first landfall, everyone, even those who for the last day or two had been overcome by seasickness, turned out to look at the sea lions clearly visible on its stony beaches and the seal oil factory — now long abandoned — where in former years, a few inhabitants once lived and worked.

Besides being our first landfall, always a great event, Guadalupe was to be the furthest western point of the voyage and served as our departure for the 3000-mile run SSE to the Archepielago de Colon, the modern name of Galapagos. We had intentionally headed offshore, partly in the hope of finding more wind (the coast of Baja, Cali-

fornia is notorious for calms) and partly to stay clear of the steamers which tend to hug the beach on the long run from Panama to West Coast ports in order to save distance and hence fuel.

The island was a landmark in other ways. For one thing the weather, till then unmistakably wintry and chill, began to get warm, at least during the days, a prelude of the tropics into which we were headed. Second, sea sickness, prevalent at first, was rapidly disappearing as experienced sailors and newly indoctrinated “landlubbers” became acclimated to the ceaseless motion characteristic of every ship at sea. Most important of all, the crew was beginning to learn to sail and to appreciate the ship.

Our first attempt at a plankton collection using a neuston net the day before had shown us pretty clearly how much we had to learn. The problem was simple: we had to lower over the side the net, a long conical affair of fine nylon mesh whose mouth was held open by a rectangular floating fiberglass frame so built that it kept the lower end about four inches below the surface and the upper edge ten inches above, thus skimming a “slice” of surface water three feet wide and four inches thick for whatever distance we towed it. The water entering the net's mouth filtered out again, but suspended materials too large to pass through the fine mesh were retained and swept by the stream into a collecting jar at the apex of the net. The description we had been given was easy enough to follow, but we had to find out for ourselves such elementary facts as how to keep the tow line clear of the side of the ship. Not only did we have to pass it through a block (pulley) on a boat davit to keep it outboard, but in addition, it was important to steer a straight course for the duration of the tow. Excessive speed made the net bury under the surface or skitter on top and perhaps most important, we had to learn the hard way how really inadequate was our tiny gasoline driven “oceanographic” winch, with its light polypropylene line. That first “tow” took the better

part of two hours even after we had learned how much sail to take in in order to reduce our speed appropriately, much of the time being consumed by our attempts to coax the gasoline motor on the winch into life. It was then that we learned two essential lessons: the only place to keep the spark plug was in the engineer's hip pocket where it would be both dry and warm; and to always have the winch motor running *before* you put the net over the side — that is, if you want to get it back in time for supper.

Nevertheless, we managed to make collections even that first day, collections which rewarded in full the labor they required. Until one has seen the profusion of life, the myriads of diverse little animals and plants of every conceivable color, size, and shape, many as yet unidentified, which a single tow of ten minutes or 2000 linear feet can produce, one has no concept of the fertility of the sea or the crowding of its waters. Until one has watched the enormous activity of these tiny organisms under a microscope and has seen the voracity with which the great consume the small at a single gulp, the notions of a biological food chain and the survival of the fittest don't begin to have real meaning. When a deeper tow shows one that this crowding, this diversity of life, extends downward from the surface for hundreds of feet, the true biological productivity of this seemingly empty heaving plain of water begins to dawn. In contrast to life on land, where fertile ground is measured in two dimensions and is spoken of as areas because life extends down only a foot or two, the fertility of the sea should be spoken of in volumes for abundant life extends down hundreds of feet and certain forms live by preference at depths of many miles.

Some of the apprentices pointed out a few of the analogies to human life and behavior these phenomena suggested — consumption of the weak by the strong; the aggressions brought out by overcrowding; the inevitable anonymity of huge numbers — anonymity not just of the individual, but of whole species.



"Each day the yard had to be suspended and secured . . ."

Others, of a less philosophical turn, found joys in the collections like one who produced the formula for constructing an "instant flashlight" — a quart mason jar half filled with plankton-rich water shaken vigorously in the dark to induce phosphorescence — a source of illumination which, while weak in total photons, told volumes regarding the origins of the luminous display which had so entranced us on our first evening out.

The suitability of *Westward* for her new job and the rapidity with which our crew was learning confidence in themselves and their ability to make her do their will came home to me a couple of nights later. For almost the first time on the voyage I had fallen soundly asleep shortly after supper. Concern over the lack of "big boat" offshore experience in the crew (including myself) and possession of a bunk which was both damp and placed athwartship had combined to produce light sleep and frequent inspection trips to the deck on earlier nights. Now, for the first time, I had a dry bed — a hammock newly sewn that day from spare canvas. Accumulated fatigue and the hammock's total lack of apparent motion produced profound unconsciousness from which I woke with a total conviction that something was terribly

wrong. The ship was quiet. The usual sounds of water slipping by the hull, of wind in the sails, and of straining gear were gone. Only occasional snatches of conversation spoken in quiet tones by the watch on deck could be heard. Her motion was different too. A gentle heave and occasional lurch had replaced the characteristic swooping roll of *Westward* running before a following wind.

But on deck, there was no disaster. Instead, I found the ship lying quietly hove-to with the wheel lashed under sail, bow pointing 60° off the wind, in the middle of a large spread-out fleet of Mexican fishing boats. The watch was quietly about its job of streaming the plankton nets, just as the fishing vessels all around were streaming their nets to catch school tuna. Although it was very dark, with stars hidden by a high overcast, no special lights were lit. Instead the crew was going about its work with that curious combination of half sight, half feel which experienced sailors use to do their jobs on deck at night.

The whole scene seemed so totally "right" that I found myself unable to go back below and instead, stood watching for nearly an hour. "Right" because *Westward* was so clearly suited to her task of harvesting the ocean's life to generate new knowledge of its natural history — just as right for her task as the diesel powered tuna boats around us were for their task of gathering the ocean's life for food. Right, too, because the ship was kindly, responsive, manageable, and maneuverable enough so that she had "trained" her crew to be able to do the work effectively and well in a relatively short time. Right most of all because it somehow seemed so natural and appropriate to be working under sail for a constructive purpose as our forebearers had done for hundreds, perhaps thousands, of years.

When the work was done and the ship back on course, the lure of sleep finally overcame the fascination of the scene. I wandered below with joy. There was a feeling of satisfaction, a sense of accomplish-

ment, a pride in the ship and her crew, a feeling of certainty about the appropriateness of our mission and a confidence that we could and would do justice to it. I climbed back into my hammock and went instantly to sleep — for the first time secure in the knowledge that I need not worry — the crew could handle things on their own.

The dawn which followed found us nearly becalmed with the tips of the mountains back of Punta Eugenia 70 miles away looking like low, sharp-edged clouds against the tropical red of the eastern sky.

Clearly, it was time to jibe over to a more southerly course that would bring the WNW wind, when it returned, over the starboard quarter (right side of the stern) to help us trend away from the land again. The wisdom of this course change was underlined by the passage close aboard of a large freighter indicating that we had re-entered the edge of the steamer lane the night before. The new course would take us comfortably to the east of the Revilla Gigedo Islands 400 miles away and so clear of all dangers unless the wind shifted requiring that we head even more to the south in order to keep our sails full.

As we proceeded steadily on our way late that afternoon, Bob, the bosun, spotted a tell-tale reddish tint to the water ahead and soon we were in the middle of a raft of Lobster-Krill — *Pleuronocodes Planipes*. A neuston net was promptly lowered over the side and in only a few minutes a whole bucketfull of the creatures was collected. This pelagic shrimp-like animal is about 1¾ inches long and bright red. Its physical resemblance to a small cooked lobster prompted the American whalers of the last century to give them their common name. Lobster krill multiply with great rapidity and because they do not seem to be very mobile (although they can swim) they tend to occur in huge rafts of closely packed organisms. In fact, these rafts may become so large and dense that the supply of plankton on which the krill feed



"Alone with one's thoughts . . ."

becomes exhausted and the individuals in the middle of the raft are perishing from starvation at the same time those at the periphery are reproducing madly.

Bob, who was thoroughly familiar with the district, told us that krill are frequently seen in the waters we were crossing and are a favored food of albicore and whales, a fact which made them an especially welcome sight to whalers in the past and tuna fishermen in the present. He went on to point out that they are excellent human food, too, and may be eaten raw or gently steamed. Widely sampled by the crew in both styles, their slightly salty sweet taste was really excellent.

Two days later, thanks to a shift of wind, our morning fix put us within 40 miles of San Benedicto, the most northern and eastern island of the Revilla Gigedo group. Since the wind had disappeared entirely the evening before, it was decided to alter course to the right to relieve the tedium of motoring by passing close to the island. Although spotted at 10:30 a.m. because of its height, the island was not close aboard until well after 2 that afternoon. San Benedicto, like the other islands of this group, (and in fact most of the islands in the E. central

Pacific basin) is an isolated volcanic peak surrounded by very deep water. The island is roughly oval about 4-5 miles in its greatest diameter. The land rises steeply from the sea everywhere and although there are one or two small beaches where landings are said to be possible, there is no harbor. As a result the island is not only uninhabited but rarely visited. On the north end some vegetation was visible but the whole southern part was a huge volcanic cinder cone looking for all the world like a giant, deeply ribbed bell thanks to the myriad vertical crevasses which radiated down from the lip of its central crater to end where they met the beach in vertical cliffs 40-60 feet high.

Needless-to-say, no sooner did it become known that we would pass close to this fascinating island than a strong move to land an exploration party developed. How often does one come upon a wholly uninhabited island in the middle of a jewel-blue ocean under a cloudless sky? By the time we closed with the island and began to run down along the eastern shore, lots had been drawn as to who would go and the Boston whaler which *Westward* carries on deck was being prepared for launching. Unfortunately no obviously good landing spot presented itself. Despite the apparent calm, the surf was breaking heavily on the beach below the cinder cone and at the only other possible landing site, the steepness of the cliffs looked as if it would make it impossible to gain the plateau above even if it proved possible to get ashore. The combination of surf, the crew's inexperience at surf landings, and the late hour which would severely limit exploration time, together with the need to keep moving if we were to reach the Galapagos in time to visit the islands adequately, combined to make me decide to abandon the attempt and proceed on our way.

Reaction to this move, to me seamanlike, was instant and dramatic. Within half an hour Roger, our captain, was being confronted by a large group of apprentices deeply disturbed by what they saw as an overprotective attitude on the part of the ship's "management." Adventure, they said was part of what they had come for and adventure always entailed some risk. If we insisted on minimizing every risk, the trip would inevitably end up dull and unrewarding. Even pointing out that the essence of a good adventure was to survive it for the next one did little to ease the frustration.

Roger handled the situation very well. Staying calm and keeping the dialogue going until tempers cooled and other reasons for disappointment and disillusion emerged, he found that part of the problem, perhaps the largest part, was that for many the sight of the island so close had generated an almost desperate desire to get on shore again even if only for a short time no matter what the risk. For virtually all the apprentices, this was the first occasion they had ever been separated from their native habitat, the land, for more than a few hours and many felt an overwhelming need to feel the land's solidity under their feet again — "Just to know that it is 'real' and that the rest of my life won't have to be spent in the constant rocking instability of the ship" — as one apprentice put it. For them, the thought of another two weeks at sea without land contact was suddenly nearly unendurable. Its expression as thwarted adventure was merely a way of disguising any confession of inadequacy which a more candid statement might have implied.

Although surprised, the more experienced crew members, remembering their own reactions to their first landfall after a long period at sea, realized that they had experienced similar feelings. Luckily a workable solution presented itself. The 5000 foot high flattened peak of the island of Socorro was clearly visible on the horizon some 50 miles to the SSW. There the Sailing Directions described a reasonably

protected landing place in a small cove on the SE corner of the 10 by 14-mile island and went on to describe a small Mexican naval installation on the higher land behind it. Going to Socorro required a minimum detour; the hours of darkness could be used to make the approach so that we would arrive early and so have a full day of light to land and explore; and the chances of our being able to get ashore seemed extremely good. A secret ballot of the apprentices indicated an overwhelming majority favored this plan even though it meant that one less day would be available in the Galapagos, and so, that evening, the rising moon found *Westward* sliding gently over a smooth sea toward Socorro under reduced sail a contented ship again filled with excited talk as plans for the "big day ashore" were formulated.

Next morning a spectacular sunrise full of brilliant red and orange clouds heralded what proved to be a memorable day. Socorro's Landing Place Cove emerged nearby as the gloom was dissipated by the sun's rays moving down the slopes of the island's central volcano filled it with morning light. Dodging whales and surrounded by porpoises (both of which are reported in the Sailing Directions as "abundant in these waters") *Westward* coasted around the southern point of the island while breakfast was prepared and eaten and then returned to the Cove where a small stone wharf, a few small boats on moorings, and a road running back from the pier and up the hill to the village on top, indicated that this was indeed the landing place.

No sooner did the ship come to a stop than the whaler was overboard and, manned by its "boat crew," we headed for shore. Mindful of a total lack of clearance to visit Mexico we dutifully requested permission to land from the members of the working party which ostensibly was carting rocks down from the stony beach to the end of the stone wharf to fill the "crib" that defined its outer perimeter, but actually was watching our approach with fascinated interest. Our re-

quest, since we spoke no Spanish and they no English, created considerable confusion until a petty officer arrived and firmly marched Roger, our interpreter, Larry (the second mate who knew about 15 words of Spanish from school), and me up the hill to the village to see "el Commandante" whose permission, we gathered, was required for everything.

The climate and topography of Socorro at the lower levels is strongly reminiscent of Southern California in mid-summer — but without the smog! It is warm, dry, and sunny most of the time. The reddish stony earth is covered with coarse dry grass and low shrubs similar to sage brush but without its characteristic pungency. Small trees resembling acacia occur in groves in more fertile areas. Higher up, the slopes of the mountain are greener, thanks to condensation from the clouds which sweep by on the ocean winds except where outcroppings of black lava rock reminded one that the central hill had once been an active volcano. A fresh water lake, we were told, fed by these rain showers, nestles in a hollow (perhaps an old crater) out of sight around the shoulder of the mountain, but there are no streams on the island and water is a constant problem for the inhabitants.

The only settlement, to which we were being led by our guide, occupies a commanding site on the plateau of the southern point of the island about 200 feet above the sea. The view from it extends out over the ocean uninterrupted in three directions — but an ocean which is almost perpetually empty except for the hazy form of San Benedicto crouching like a sphinx on the NE horizon. The village adobe buildings simple but neat, reflecting their Naval sponsorship perhaps, are grouped in a thin line around a large flat area pointed out to us with pride as the "Campo de Football!" The goal posts with nets at either end indicated that soccer was the kind of universal "football" played here as elsewhere in Latin America. The school and radio-station dominated the village itself.

The hospital and the Commandant's office and house set somewhat apart from the bustle of the village and a tiny church on a knoll overlooking the landing completed the picture.

The Commandant proved to be warm and charming if somewhat tongue-tied by our lack of a common language. However, thanks to Larry's "un muy poco" Spanish, the island doctor's English, and the commandant's daughter's and my French, greetings of suitable formality were exchanged and *Westward's* crew were afforded the "freedom of the island." This hospitality soon proved to include such kindnesses as guides to take parties up into the mountain (one tour took 3 hours of walking) and offers of all sorts of supplies — even their scarce fresh water was offered.

The ship reciprocated by inviting the Commandant, his staff, and family to lunch aboard — an invitation that was quickly accepted for 11:30. When no one had appeared on the pier at 12:30 concern began to develop lest our invitation had been misunderstood, but luckily the suggestion to send someone up to ask if the Commandant was really coming was checked by those more familiar with Latin protocol who assured the less experienced that the more important one considered one's hosts and his invitation, the later one was expected to arrive. Sure enough, at 12:45, a cloud of dust coming down the hill from the village announced the arrival of the guests who were soon aboard.

Lunch proved a most pleasant, at times hilarious, affair, thanks to everyone trying his best to be understood in his own or his new found friend's language. Meanwhile, a big soccer match was arranged — *Westward* vs Socorro for 3 p.m., a special dispensation from the Commandant, since it meant allowing the men to stop work early even though it was only Friday and so usually a full working day.

The match was a huge success despite marked differences in the skills and equipment of the two teams. Everyone came. Men, women, and especially children of all sizes but mostly under 5. One man who had trained in the U.S. Navy told us Socorro was a very good place for children — "No movies at night here" — he explained, to make us understand clearly how it happened that the 35 married members of the 68 man garrison had 122 children between them! Even though *Westward's* team was allowed unlimited substitutes and a few of its members were really quite competent players, they were no match at all for the neatly uniformed, well shod and extremely well organized, home team. Despite a 9-0 loss, the visitors were as roundly or better cheered by the spectators as their own team, and at the half-time break the players were welcomed into the adjacent houses for cool drinks of water and general visiting as though these Mexicans and young Americans had been friends for years instead of having met that afternoon for the first time.

When the game ended the sun was low on the western horizon and it was time to go. Warm smiles and handshakes told more about mutual feelings than the murmured "good-bye" and "adios" which accompanied them as new friends parted. Finally, before the last boat load could leave the Commandant insisted that we accept a live ram from the island's flock of sheep to provide us with fresh meat for our voyage as a special memento from Socorro and its people. Despite the consternation which this gift generated it was abundantly clear that to refuse would deeply hurt the donors. So the terrified animal was loaded aboard the whaler and we proceeded aboard while the antivivisectionist-ecologists argued with the gastronomes about what should be done with it! The abundance of fresh meat in *Westward's* freezer decided the issue in favor of the former. A quick trip to the beach in a nearby cove well out of sight of the village freed the ram on his native soil before the schooner set sail and turned her bow to the

SE heading for her next land fall at the Galapagos 2000 miles away. A well-travelled apprentice from Ohio summarized the general feeling as Socorro and its twinkling lights faded into the dusk astern: "I will never forget today," he said. "Today was the first time I have ever visited with people in their country as a friend instead of a tourist. It makes all the difference doesn't it?"

Put one way, the next two weeks of *Westward's* voyage could be called "uneventful." Day after day we sailed on under sunny or star-filled skies. The weather was warm so that nothing more than a shirt and shorts was ever required day or night. No gales or rough seas were encountered and only one day of rain. Indeed, a lack rather than a surfeit of wind tended to be the problem so that the diesel was needed for propulsion (more often than we would have liked) especially as we approached the doldrums near the Equator. Yet these quiet days were anything but "uneventful." Instead, they were so filled with activity and events that sometimes one felt as if we lived in a beehive.

It is hard to make clear to land people what goes on aboard a ship during a long voyage that keeps one so busy, makes one so tired, makes boredom such a minor problem for the crew.

Ship board life on *Westward* has many parts, each of which demands attention. First, everyone has watches to stand. Night and day the ship must be sailed so the crew is divided into 3 watches of 6 each under a watch captain — 7 people awake to work her — steer, stand lookout, set and trim sails — at all times. The day is divided into 5 periods. Thus each watch's duty hours change from day to day. The rest of the crew — captain, doctor, cook, and navigator — are "idlers," an old seagoing term for non-watchstanders who are expected to get on with their jobs whenever and for as long as circumstances require.

Then there are lectures; on nautical subjects such as navigation, ship design, sail theory, and small boat handling in the mornings, and on oceanography in the afternoons including marine biology and the geology, physics, and chemistry of the oceans and their basins. Regular cleaning below decks is essential when 26 people are crowded into a 100-foot vessel, so each apprentice is expected to help clean some "public" area as well as keep his own bunk space habitable. Moreover, there is galley duty — not just dish washing but serving too as cook's helper in the preparation of the 78 meals that must be served and eaten every day. Add to all that, time to practice navigation, help with plankton collections, peer down the microscope to see what we caught today, talk to your friends, eat, swim when the ship is hove-to on oceanographic "station," wash yourself and your clothes, read, and write your personal log, and the wonder becomes how there is time left to sleep!

Then, too, there is deck work. Fashioning a new square yard dominated this for most of the voyage. Shortly after leaving San Diego the broken one had been carefully measured, noting the location of the various fittings before removing the hardware and disposing of the remnants of the spar overside. Now, the problem was to taper the larger end of the telegraph pole we had purchased as a replacement to match the natural taper of the other and so create a new yard symmetrically tapered from its center.

Bosun Bob was the "hero" of this operation. Carefully measuring the diameter at various points along the distance between the center and the smaller end, he concluded that the best approach to creating the same even taper at the other end was to make it square first and then round it off with a plane. This was done by marking its length appropriately with chalk-lines before making multiple shallow cuts with a cross-cut saw along the part to be removed and splitting the wood out between them with a chisel.

Although simply described the operation was not that easy. Each day the yard had to be suspended in a convenient working position and secured against the pitch as well as the roll of the ship lest it begin to oscillate back and forth like a 300 lb. Roman battering ram. Moreover, the labor required and the chips generated were both tremendous, occupying the energies of 2 to 3 men for most of every day (between oceanographic work and sail changes) shaping, sanding, painting, re-installing hardware, and cleaning up. Yet this seemingly endless job was eventually completed and all hands had the satisfaction of seeing the new yard "crossed" (hailed aloft into position) for the first time while the ship lay at anchor in Seal Cove at Santa Fé (Barrington) Island.

But, this was not the only major work to be done on deck. Nearly 200 ratlines had to be replaced, each involving separate careful measurement because the shrouds (side stays) across which they are stretched are spaced two feet apart at the deck but meet where their upper ends are fastened to the mast just below the spreaders for the topmast shrouds. A splice had to be made in each end through which to pass the lashing which ultimately secured the ends of the ratline to the vertical wires. Twenty minutes from the initial trip aloft to measure to the final descent after installing was considered good time for a strong fingered experienced ratline maker so progress was slow. Still ratline making was a pleasant and popular occupation. The smell of pine tar from the rope warmed by the sun, the challenge of making a neat pair of splices, the view from the rigging, and perhaps the special opportunity which the final lashing-in-place afforded to be alone with one's thoughts combined to make it a much sought after duty.

Then, too, there are those myriad little jobs which always need to be done — oiling blocks, replacing worn lines, re-lashing loose gear, sewing sails, scrubbing decks, and in a steel ship like *Westward*, the constant war against rust waged with chipping hammer and paint

brush. Like the housewife, the sailor's work is never done.

The navigator as an "idler" has in many ways the best of worlds. His job is defined and as long as the weather is clear and land distant his responsibilities are easily discharged so he may sleep deep and long with an easy conscience. He may eat when he will and participate in other labor only when he wishes, secure in the knowledge that as "King" of the track, the man who "Knows Where We Are," his social prestige and acceptance by his shipmates is guaranteed even if he seems lazy. Best of all, his day begins and ends among the stars. For it is in the twilight that he does his best work. Then, and only then, when it is dark enough for stars to be visible and light enough for the horizon to be seen is it possible to obtain nearly simultaneous observations of several celestial bodies and so determine a precise fix of position independent of all calculations of speed and course. Therefore, sunrise and sunset — those two most beautiful of times — and the forest of stars which is such a feature of the tropic night, are all his special domain where he can be found, sextant and watch in hand, performing his magic.

On *Westward*, evening stars was the time for teaching and therefore was not only a well attended, but often very excited, time as apprentices vied with each other to get perfect fixes — ones in which the lines of position from each star all intersect at a single point. "An orgy of Stars" was the way an observer described the scene on one specially clear evening when good sights were being obtained by nearly all. But morning stars was really the very best time. Rested after a night of sleep one shared the promise of the dawn with no one but the watch on deck and an occasional devoted acolyte. Remembering the peace of those moments spent waiting quietly for the horizon to emerge in the growing light still provides perspective to deal with the rush of daily "shore side" problems 14 months later.

One of the special features of life

at sea is that there one becomes aware that time is a continuum — each day blending with its neighbors before and behind into a steady stream of hours, rather than being divided into “nights” and “days” by our biological needs for alternating rest and activity as it is ashore. For the ship never rests. Day and night are the same to her as she carries us on our way and her demands for attention can and do come at any time. The sailor in response soon learns to do his work and take his rest regardless of illumination and the clock hour, responding instead to the fatigue of a watch-full of work by taking his rest immediately for whatever time is needed to refresh him, rather than waiting for some arbitrary “bed-time,” as we do on land, when one can begin to sleep away an accumulation of fatigues.

Nonetheless, the day is divided into periods by the routine of activities which fill it. If we start with the navigator hurrying below to calculate his “morning stars” a typical day runs like this: The watch captain in the growing light begins to see the accumulated disarray of the night and turns his watch to hosing down the decks, re-coiling lines and generally neatening up while the banging of pots echoing up from the galley indicates the cook is awake and preparing breakfast. Meals are served in 2 settings at watch change: 7:00 am, 1:00 pm and 7:00 pm, the watch going on being fed in the ½ hour preceeding and the watch coming off in the ½ hour following the change time. By 6:30 sleepers are up and as breakfast is eaten around the big swinging table in the main saloon conversation grows with wakefulness. Breakfast is the time when the projects for the day are planned and discussed — who will work on the spar with Bob, who will make ratlines, is there anyone who would like to paint that bad rusty place on the port bulwarks amidship? The discussion is interrupted briefly while the new watch takes over and the last watch comes below telling tales of last night’s activities to bring their shipmates up to date. The food which served

to wake the sleepers comes to them as a reward for duty done and with it the premonitory yawns of impending sleep. Soon they move off to their bunks glad to leave the responsibility of carrying on to others for a while.

Maintenance work and other projects fill the morning for all but the watch just off duty until 10:30 when coffee and a snack bring the majority below for the “nautical science” lecture of the day. By the time this is over it is noon and time to heave-to for plankton tows and other measurements appropriate to that “station” while the navigator takes his Meridian Altitude sun sight, traditional since before Columbus, and plots the ship’s noon position from it. If conditions permit, a swim, while the ship is pausing in her flight, cools, entertains and cleanses the crew.

Lunch is eaten as the ship is gotten underway again and following a period of rest for reading or dozing during the heat of mid-day, another afternoon work period begins — a time for completing chores begun but not finished in the morning when enthusiasm and energy tend to be highest. “Tea” and another snack — fresh cake, more often than not, baked by the galley helper of the day and presented with pride or trepidation depending on how well it rose — end the work period about 3:30 and serve as a prelude to the oceanography lecture which completes the afternoon.

After supper is the time for “socializing” on ship as well as ashore. The bustle of the day is over and people tend to congregate aft around the wheel to sip a final mug of coffee, tell stories, exchange views, or make music. On several evenings, whole concerts developed quite spontaneously as the musically inclined brought out their guitars, harmonicas, Jews’ Harps, recorders, and tambourines for a “jam session.” At other times one or two would play and sing favorite songs. Frances our cook was especially talented at this. Her repertoire of songs was extensive, her trained voice clear, strong, and as sweet as her guitar. Memories of

a silent crowd in the failing light bunched around the wheel box on the fantail listening to Frances’ poignant folk melodies as *Westward* sailed steadily and quietly onward in the sunset come flooding back as I write.

Evening star sights occupy the dusk, and calculations of them the early evening, for the navigator and anyone else bent on learning the practice of navigation. The music over, others not on watch drift below to rest in preparation for their turn on deck, or for reading, chess, log writing, etc. By 9:30 or 10:00 few are left awake to keep the watch company.

Midnight brings a new flurry of activity for the ship must be hove-to again for more plankton work. The choice of noon and midnight for the collections is not arbitrary but rather is designed to examine the vertical migrations of these tiny creatures in response to light. Vertical movements of several hundred feet twice each day are performed by uncountable millions of animals so small they can only be seen under a microscope — the reasons for this remarkable fact are as unknown as is the fact itself among the general public afloat and ashore. Usually, the watch, assisted by a sleepy naturalist and perhaps one or two plankton enthusiasts, does this work without flurry or fanfare; so quietly, indeed, that it is rare for sleepers to be waked by the activity. The collections from the nets are taken below for a quick search under the scope for unusual forms before preserving the balance in formalin in a sealed container carefully marked with the time and geographical location of the collections. Notation in the scientific log of the same data plus comments on anything significant or new seen under the microscope completed the scientists’ work so he can return to his bunk. Meanwhile, sail is re-set and the ship returned to her course to roll on toward her goal under the equatorial stars.

The problem with most night watches is keeping awake and alert. They come at the nadir of our diurnal energy cycle which seems to continue its oscillations despite the stress imposed by the cycle of watches. As a result they tend to be a time for many little trips below for something to eat, more coffee, more clothes, to look at the clock, or to get warm (one tends to feel the cold more then, too). On the other hand, they have their compensations. It is the time when one has the ship to oneself. One can feel her power as she drives along better because there is no interruption; sea sounds are more intense because there is no distraction; even the sea's smells seem more intense perhaps because of the higher humidity of the night. It is the time, too, when one gets to know one's watch mates best. There is more time to talk but in addition, night is a time for exchanging confidences, when we all tend to speak from closer to the heart. The strangeness of the sea as an environment and awareness of its hidden perils seem intensified by the dark, driving people to seek the comfort and reassurance of each other. The friendships forged in night watches at sea are among the best and strongest of our lives. When one sailor introducing a friend to another says: "We were watchmates in . . ." volumes are said about the strength of the relationship between them.

The end of the night comes for the seaman in *Westward* as on every ship with the first lightening of the Eastern sky. Suddenly it is time to wake the navigator and cook, for the day is starting its round again as the dawn brightens to herald the rising sun.

One should not gain the impression that the only "events" filling our days were the minor ones generated exclusively by the ship and her crew. The ocean is a busy place full of all sorts of life in addition to plankton if one is willing to look for it. Ships, although not plentiful thanks to our intentional avoidance of major shipping lanes, were still sighted regularly by the lookouts,

each an "event" which brought the crew to the rails to gaze and photograph if we passed close enough. Then, there was the fishing. *Westward* routinely tows a fishing line with an artificial lure "just in case." Although not much was caught on the voyage, 3-4 dolphins took our bait and were dragged aboard, our distress at causing them to lose their brilliant iridescent colors in death more than compensated for by the prospect of delicious fresh fish to bolster our diet. But, much the most exciting life we saw were the whales and porpoises, especially the whales.

The east central Pacific basin on both sides of the equator was one of the favorite cruising grounds of the American whalers of the last century. The reason for this was borne in upon us as day after day we sighted pods of sperm whales, each usually consisting of one large bull, two or three smaller cows and more often than not a calf or two. These family groups generally were moving slowly — at no more than 2-3 knots staying on the surface and easy to spot and track by their regular spoutings. They seemed unperturbed by *Westward's* presence, for on several occasions we passed very close to them without causing them to alter their behavior. We even gave chase to one group in the hopes of getting good photographs, a procedure which ultimately caused them to sound majestic flukes in the air, only when we turned on the engine in an effort to close the gap between us more rapidly.

The crew's interest in whales reached a somewhat malodorous climax one morning near the end of the passage when the carcass of a small dead whale was spotted just off the port bow. As *Westward* approached under power, the shape of the head indicated that it was a sperm whale despite the depredations of the sharks still lingering nearby who had entirely consumed the tail and whose half-moon shaped bites were clearly visible in the blubber of the flanks.

"Teeth!" said Bob and I to each other as we both spotted the long mandible hanging in the water under the mass of the partly decomposed head. The sperm whale is one of the *Edontoceti* — the toothed whales — and a carnivore, its long lower jaw being equipped with a row of 17 sharp backward slanting teeth on each side. These teeth have long been prized as ivory for carving the "scrimshaw" made famous in various books about whaling, modern examples of which can be bought in souvenir stores especially those selling Norse or Eskimo handcrafts.

The upshot of our mutual excitement was that *Westward* was stopped. The rubber raft was launched and used to secure a line to the carcass which was then dragged alongside where the two mandibles were cut free and hauled aboard while the rest of the crew held their noses in horrified fascination. Then, the remains were set adrift again and as *Westward* motored away, the cloud of predator sea birds above and sharks below closed in again to devour the whale.

Decay and sharks had already stripped most of the soft tissues from the lower jaws so extraction of the teeth was not too difficult. These were then scraped clean after prolonged soaking in strong bleach and dried to provide most interesting mementoes for everyone. The two mandibles were secured under the stern where the sea eventually cleaned them and washed away the smell. One of them occupies a place of honor now in the SEA office while the other is part of a collection of diverse mammalian bones in the biology department of the Wyzatta, Minnesota, High School, whither it was hand-carried by two apprentices — much to the consternation of the stewardesses on the plane, it was later reported.

All great adventures, including ocean passages, eventually must end. Each day our noon position crept closer to the equator at longitude 90° where the Galapagos Islands lie. Then one morning our

usually deep blue sky was dulled by a thin high overcast of the kind so common in New England and the water temperature, which had hovered around 85°F while we crossed the northern equatorial current, suddenly plunged to a chilly 74°, sure signs that we had entered the fringe of the great Humbolt Current which sweeps northward along the west coast of South America to turn to west at the Galapagos Islands. This current, which runs at a velocity of 1-2 knots, is responsible for the unusually temperate climate of the archipelago (which from its position astride the Equator should by rights be very hot), its fogs, and in all likelihood the presence there of a number of species of birds such as penguins and albatross which are more generally associated with Antarctic than Equatorial regions.

Morning sights, obtained with some difficulty because of the haze, put us 40 miles from Isla Genovosa (Tower Island) the northeasterly corner of the archipelago. Announcement, at breakfast, that we would reach land during the day was received with calm, almost unconcern, by the apprentices who returned almost immediately to discussions of war-protest politics and how sails work, which seemed to have started up that particular morning. Only the professional crew seemed excited by the prospect of land, harbors, and a change of routine. The explanation of the apprentices' reactions came a little later.

Navigators get jumpy at landfall time. No matter how confident a navigator may feel or try to appear, the ultimate truth about his competence is clearly brought home by the simple fact that the land does or does not appear where and when he said it would. My prediction was land in sight by 10:30. Shortly after 10, I could stand it no longer and retired below for an early coffee while visions of innumerable calculations reeled through my head as I looked for possible errors that might explain the lack of a landfall as predicted. A few minutes later an apprentice

who had been finishing securing a ratline high on the foremast flopped himself down on the bench, poured himself some coffee and remarked half angry — half sad: "Well, that is that!" "What's that?" someone asked. "The land," he replied, "There has been an island clearly in sight ahead for some time; the voyage is over, and I am not a bit sure I am ready for it to end yet!" "You mean you don't want to go ashore?" I asked, remembering suddenly that this man had been one of those most anxious to feel land under him as we approached Socorro. "That's right!" he said. "I have been happier during the last two weeks away from the land than I can ever remember being while on it and I really don't feel ready to go back to it with all its problems right now!"

As I left for the deck as nonchalantly as I could see the wonder of the landfall (*my* landfall I had been saying to myself) I found that I, too, felt some of the feelings he had expressed. *Our* voyage was, indeed, ending and with it a comradeship born of a special set of experiences belonging to us alone which had grown imperceptibly but steadily as the days had passed. It was hard to believe that it would soon stop growing and, becoming a memory, begin to fade as it gradually became overlaid with other experiences and friendships.

So much has appeared in print and on the television screen about the enchantment of the Galapagos and so many people have been there, thanks to the tourist boat which makes the rounds each week under the sponsorship of the Ecuadorian government, that it hardly seems worthwhile to extend this account with the "Ooo's" and "Aaah's" of one more visitor, even one who arrived by sail. Besides, this started as an account of a voyage "to Enchantment" not a description of it. Nonetheless, the stay of my adventure would be incomplete without a few words about highlight impressions of those remarkable islands.

First our landfall: Flat, round, dry, waterless, Tower Island is a bird

rookery. These frigate birds, sinister masters of flight, boobies (both red and blue footed), lava and ring-tail gulls, as well as other species of sea-birds live and multiply by the thousands — and by the thousands they flew out to greet us as we arrived, surrounding the ship with their flocks and filling our minds with their cries. Of all, the frigate birds were the most impressive. Usually solitary, lonely flyers, they keep watch high in the sky for other birds like boobies whose catches of fish they can steal. But, at Tower they surrounded the ship in droves diving to snap at the red knob on the masthead radio antenna or the outstretched hand of an apprentice on the bowsprit, even roosting in rows on the triatic stay high between the masts.

Indented into the south side of the Island is a caldera, a small volcanic crater, now open to the sea through a small aperture to give an almost round, nearly landlocked, harbor ½ mile in diameter into which we slipped in the late afternoon to lose for the first time in 24 days the roll of the open sea. We did not anchor there for the depth is nearly 1500 feet in the center, but we did explore the harbor edge by Whaler — apprentices peering with interest at the sea-eroded lava rock of which the island is made.

The opportunity to graduate to "Shellback" from "polliwog" by Crossing the Line — the Equator — the first of the great benchmarks of sea-going experience (the other is rounding Cape Horn) came during the next day on the passage from Tower Island to our port of entry on San Cristobal Island. The ceremony is a mock trial presided over by King Neptune and his Queen. It is conducted under the guidance of Davy Jones, whose locker at the bottom of the sea is filled with sunken ships and all things lost overboard. Proper initiation rites, including punishments for misdeeds committed while in polliwog status, were devised and executed for each 'wog by the fertile evil minds of several "pirates" recruited for the occasion from among the ships company.

All this was the occasion for much hilarity at least for those who had already run the gauntlet if not for the person doing so at any moment.

Puerto Baquerizo Moreno was the first foreign port of the voyage and the first ever for many of the apprentices. The visit to this the "capitol" of the Galapagos, since it is the base of the Ecuadorian naval unit which controls the islands, was memorable for several reasons, but two emerge most strongly. For at least 4 apprentices it was there that they learned at first hand the "evils of drink" — or, put another way, how fast and thoroughly locally brewed Tequila, urged on one by a hospitable people in their local tavern, can intoxicate a head that has had to handle nothing stronger than tea for 25 days! Fortunately, the whole episode was treated with great good humor by the Town and the Navy even though the constabulary was eventually called to end the party and help disperse the rather unruly crowd which had assembled to enjoy the spectacle of four of their visitors being carried home by colleagues in nearly but not quite equally parlous shape.

The other was the extent to which overlapping relationships between people create friendships even in places as remote from home as the Galapagos. The instances which exemplified "how small the world is" in Baquerizo developed when we were invited to visit the Darwin Research station's 70-foot motor vessel *Beagle III* for advice on what to see in the islands. Her captain, a genial New Zealander, once a career British Royal Navy Officer, turned out to have served in submarines in World War II with one of my neighbors at home. Moreover, on closer examination of our pasts it turned out that we had even met before — by best calculation in a Pub in Cowes, England, over a pint of ale with a mutual friend in 1949! While these coincidences were being discussed the local radio operator (from the Ecuadorian Navy) arrived to call. His rather odd, for a Spanish speaking person, christian name "Gifford" proved to be the result

of a friendship which blossomed between his father and the father of one of SEA's trustees when the latter visited the islands on a scientific mission in the late 1920's. I wonder sometimes whether whales, the only other species with the opportunity to travel about the world like man, experience similar coincidences!

Every visitor to the Galapagos from earliest times has remarked upon the fearlessness of the animals as well as their abundance and uniqueness. Two experiences come to mind in this connection. Parting the branches of the acacia trees at the edge of a lagoon on Floreana Island one day, I found a flock of 75 pink flamingos feeding in the shallow water 30 feet away. So unconcerned were they by the presence of this photographer that I had to wade to within 4-5 feet of them before they spread their black edged wings and took flight wheeling away to another area of the pond honking their annoyance like so many Canada geese.

The other unforgettable experience was playing with sea-lion pups. Late January is when the pups are just learning to swim and every colony is full of them. At Seal Bay on Barrington several mothers had pooled their resources and herded their young into a shallow rocky lagoon to play where they could be watched by one female while the rest frolicked with the bulls offshore. I spent nearly two hours watching this brood chasing each other, splashing, and rolling over each other like so many kittens.

"To leave the ship and her crew at peace in that lovely place . . ."



As curious as they were fearless, these youngsters came over to see this strange intruder sniffing his feet and hands and responding to his splashing of them by splashing back.

I like to think that my voyage ended there under the sun on the rocky shore of that desert island and to forget the passage to the village at Academy Bay, the emotional turmoil of my last evening aboard when I was not sure I could tear myself away from my shipmates, the passage through the dawn by island sloop to the airport at Baltra, and the long flight home alone. It certainly makes a better ending to the story to leave the ship and her crew at peace in that lovely place with perhaps a vague dreamlike feeling that despite all evidence to the contrary she is still there even now at home with her people in "Enchantment."

The final question, of course, is "Has SEA's program succeeded in making sailing "meaningful"? For me, as perhaps has been learned from this account, the answer is "Yes;" for the apprentices their comments, later actions and letters, all indicate an equally affirmative view; for the rest of the world, especially that of oceanography, only time and more experience will tell.

1. "Westward to the Enchanted Islands" by Mary Crowley. *Oceans*, No. 6, 1972.
2. "Westward to the Galapagos" by Bernard A. Goldhirsh. *Sail Magazine*, Vol. 3, No. 6, June, 1972.

New Directions in Neighborhood Law Practice

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The establishment of neighborhood legal services offices and the reawakened consciousness among physicians of the importance of family practice, particularly where the health needs of the poor are concerned, have caused both attorneys and physicians to turn in new directions. They are beginning to realize that traditional legal and medical skills are inadequate to handle satisfactorily the enormously complex ills associated with poverty which clients and patients thrust upon them. Finding that they are confronted with similar problems, and, if they work in the same community, often with the same clientele, lawyers and physicians are beginning to turn to one another for assistance.

The Harvard Family Law Project is one example of the ways in which lawyers are reaching out to other disciplines in order to grapple with the problems which arrive at the doorstep of a neighborhood law office. Established in 1971 at the Harvard Legal Aid Bureau, with the aid of a grant from the Peter B. Livingston Fund of Harvard Medical School and Massachusetts Mental Health Center, it has subsequently expanded to the Somerville and Central Square offices of Cambridge and Somerville Legal Services (CASLS). The Project reflects lawyers' concern for providing more effective service in the family law area. Matters involving family difficulties — divorce, separate support and care and protection cases — have traditionally been a large part of the Bureau's and CASLS's caseload. Lawyers realize that all too often the "legal prob-

lem" with which they are asked to cope is only the tip of an iceberg of deeper family difficulties. Yet they frequently feel at a loss to deal with these difficulties or do not know how to adequately bring them into the open during the course of an interview.

As a result, both the Legal Aid Bureau and CASLS have felt a need to become more familiar with the techniques and resources which psychiatrists, social workers, and clinical psychologists can bring to bear on family problems. They are exploring how lawyers and health care professionals, through the experience of working together as a team, may learn to utilize their respective skills more effectively. In 1972-73, a team consisting of Dr. Gerald Kraines, a psychiatrist, Dr. David Epley, a clinical psychologist, and Dr. Alan Siskind, a social worker, has been consulting each week at both the Bureau and the Somerville office of CASLS. Each is presently a fellow at Harvard Medical School's Laboratory of Community Psychiatry and is also sponsored in this work by the Office of Prevention of the Massachusetts Department of Mental Health. Dr. Ralph Hirschowitz, assistant professor of psychiatry, and Dr. Brian Doyle, clinical instructor in psychiatry at the Cambridge Hospital, supervise this team. Other members of the Cambridge Hospital staff, particularly George Ellsworth '68, formerly chief resident in community psychiatry, and Judith Freiman, supervisor of medical social service, have also been enormously helpful, as has Ros Winsor of the Family Counseling

Service of Cambridge. In addition, David Speigel '71, clinical fellow in psychiatry, and Belle Ruth Naparstek, a psychiatric social worker from Cambridge Hospital, have been holding regular office hours throughout the year at the Central Square office of CASLS.

At the weekly case conferences at the Bureau and the Somerville office of CASLS, attorneys and second and third year law students (beginning their "clinical years") have talked over troublesome non-strictly-legal aspects of their legal caseload with Drs. Kraines, Epley, and Siskind. Their assistance has been most frequently sought in situations involving mental commitment, problems of excessive client dependence, and determining the best interests of the child in care and protection cases.

Crisis Intervention

Many of the cases in which consultation is sought involve severely disorganized families who habitually live in crisis. Sometimes a client from such a family will become emotionally dependent upon a legal services attorney, just as, later examination may reveal, he or she is upon a whole network of social service personnel in the community. Such a client may come into the office asking the lawyer to obtain a separate support order or a divorce. Sometimes a divorce is not desired at all, the trip to the legal services office being undertaken mainly to dramatize to the spouse a need for more love and consideration. But often arrangements for separate support or a

divorce proceed quite far, then, at the last minute, the client suddenly backs away. In reality, while ostensibly asking the lawyer for help, the client is actually quite unwilling to face or make certain basic decisions about his or her life and is using the lawyer (and other "helping" professionals) to maintain a chaotic life style in equilibrium. In this sense, the lawyer undergoes very much the same experience as the psychiatrist, whose patient suddenly terminates therapy. The consultants from the Laboratory of Community Psychiatry have helped Legal Aid Bureau and CASLS attorneys to understand what is going on in such situations and to focus for the client those decisions which the client must make before the lawyer can proceed helpfully.

To understand what a client "really" wants necessitates an understanding of how the family system of which he is a part is operating. Drs. Kraines, Epley, and Siskind have tried to untangle what, at first seem very contradictory love-hate relationships among family members and show how certain situations and certain times of the year (such as the Christmas season and the attendant memories it invokes) may place a heavy strain upon family interaction.

In the course of case consultation, the fellows from the Laboratory have been on the lookout for "theme interference" — how a particular mind-set can interfere with a lawyer's objective evaluation of his client. Some lawyers, while outwardly expressing great empathy for the poor, become internally annoyed at clients who, in a period of crisis, continually "foul up" and appear unwilling to act in their own best interests. Sometimes an attorney, due to a similarity of past experiences or feelings, may over-identify with clients in unproductive ways. Overall, however, the consultants have come away much impressed with the intuitive sensitivity with which most lawyers at the Bureau and CASLS relate to clients in crisis.

The Adversary System

Many of the cases in which consultation has been sought highlight a persistent conflict that occurs between the adversary system — the mode within which lawyers traditionally operate — and the more collaborative model of dispute resolution which physicians and mental health personnel usually employ.



For example, a welfare mother may bring herself and her children for treatment at a hospital. After a period of seeing the children and counseling the mother, the medical and psychiatric staff may jointly conclude that the children are failing to thrive and urge the Division of Child Guardianship to remove the children from the mother. The mother, thereupon, goes to the Legal Aid Bureau for assistance, and the court, acting on the Division of Child Guardianship's petition for custody, appoints a CASLS attorney to make an independent evaluation of the best interests of the child and report his recommendations.

All kinds of issues are raised by a situation like this. What if the Legal Aid Bureau lawyer, after interviewing the mother, gathering the family history, and seeing the children, tends to agree with the hospital authorities that the client is not the best person to raise the children? How should he handle

the ambivalence of being bound, under the adversary system, to present the strongest case possible for his client's keeping the children while wondering whether this is in the children's best interest?

Conversely, if the lawyer is convinced, contrary to the diagnosis rendered by the hospital, that the client should keep the children, how will it be possible to arrange for free or inexpensive expert medical testimony to back up this contention? Obtaining a free psychiatric evaluation and, even more, convincing a psychiatrist to testify in court (with its inevitable delays and consequent interruption of the psychiatrist's schedule) is a persistently vexing problem for legal assistance attorneys. Perhaps psychiatrists, like lawyers on call for the American Civil Liberties Union, could be organized to be available for evaluations and testimony on behalf of clients who cannot afford such expert help. What if the client's neighbors, who may believe her to be a good (or at least adequate) mother, are reluctant to testify in opposition to hospital personnel on whom they, because of their poverty, are dependent for continuing medical care? How may the lawyer convince the hospital that its judgment may have been reached through perhaps too easy a willingness of professionals accustomed to collaborating with each other to agree, and not through an adequate balancing (achieved through a more adversary process) of the client's strengths against his weaknesses? And how may legal service agencies vigorously oppose the hospital or local family service agency in a particular case and still keep the channels of communication open and foster a spirit of cooperation in other cases?

Resolving some of these issues — which have been considered during the course of the consultation — is an important challenge for the future. Lawyers, psychiatrists, clinical psychologists, and social workers often operate on very different premises, and it is essential to get them out into the open. A social worker, or family

therapist, for example, accustomed to watching all parties in a family dispute interact and to recommending a solution which focuses upon the needs of all may ask some very hard questions of lawyers accustomed to working within the confines of the adversary system. Through the process of mutual discussion, lawyers may come to question the efficacy of the strict adversary system, and learn some of the advantages of cooperation, while medical and social service personnel may incorporate into their approach one of the chief advantages of adversariness — a painstaking, though sometimes very argumentative, weighing of aspects of a patient's case which they might not, at first, be disposed to consider.

Clinical-legal Education and Interdisciplinary Case Conferences

While it has long existed in medical schools, clinical education has become part of the law school curriculum only recently. In a provocative article in the *Harvard Law Review*, Dr. Alan Stone, professor of law and psychiatry at Harvard, emphasized the importance of clinical legal education for law students' self-actualization, especially after the sometimes demoralizing experience of the first year in law school. With the arrival of Professor Gary Bellow and his courses in the *Lawyer's Process* in 1971, clinical legal education has become very popular at Harvard Law School. But, as Dr. Stone has emphasized, law schools must provide much more systematic training in human relations skills than they now do, lest clinical work have psychologically counterproductive effects both for the student and his clients.

The Family Law Project, with its interdisciplinary case conferences, is an attempt to introduce some supervisory expertise into the legal aid setting. Any member of the Legal Aid Bureau or CASLS who has a client with a problem which might benefit from interdisciplinary analysis is welcome to

attend, and bring that problem to the attention of the case conference and Drs. Kraines, Epley, and Siskind. One persistent difficulty which legal services lawyers experience in dealing with clients with a complex problem is knowing how deeply to get involved in a family situation. It has been suggested that poor families, like wealthy families, should have a "family lawyer" who can be a bulwark in all difficulties. This role appeals to many idealistic student-lawyers who feel a need to "help." Yet a serious conflict may develop between the role of family advisor and advocate for an individual member of the family against other members. If a student-lawyer's immersion becomes so complete that he is almost "another member of the family," he may lose the objectivity which is an important part of his profession.

Some clients, as noted earlier, develop a psychological dependence upon legal services lawyers, telephoning them several times a day or coming to them with needs which are in almost no sense "legal." It is difficult for attorneys to know how to react in such situations. On the one hand, they realize that these clients are a severe drain on "legal" time which might be put to better use; on the other, they fear that if they do not listen, no one else will, and the client may "disappear," with his needs unmet. The health care professionals with whom we have worked have made us conscious that physicians, psychiatrists, clinical psychologists and social workers, all of whom have busy patient loads, have long been wrestling with the same difficulties. Lawyers are not alone. The "family doctor" also worries about how to divide his time between the physical and psychological needs of his patients. Building on their own experience, the consultants from the Laboratory are helping members of the Legal Aid Bureau and CASLS learn to navigate their way between the Scylla of over-involvement and the Charybdis of under-involvement with clients.

Interdisciplinary case conferences

have also been extremely helpful in encouraging lawyers to be skeptical of the jargon and to challenge (or at least question) many of the "diagnoses" which appear in psychiatric and social work reports. Often members of one profession tend to be overawed by the "expertise" of those in other professions and are unable to deal analytically with their conclusions. For this reason, law schools have long offered courses in accounting, so that lawyers will not be totally mystified by (and possibly subservient to) those who can toss around terms like "lifo" and "fifo." More recently, with the aid of the Public Policy Program at the Kennedy School, Harvard law students have experienced increased exposure to statistics and decision-making theory. The consultants from the Laboratory of Community Psychiatry have provided a similar introduction to their own respective disciplines. And, if anything, they have consistently stressed the incomplete state of present psychiatric and social work knowledge and how few "answers" their professions have. They have also helped lawyers and staff to interpret medical and social work reports with more self-confidence and to make more sophisticated presentations to the court on the "best interests of the children" in custody and care and protection cases.

Referrals to Other Agencies

Almost everyone at the Legal Aid Bureau and CASLS believes it is necessary to strengthen lawyers' knowledge of community agencies — and specific people in those agencies — to whom aspects of cases, calling for skills not normally possessed by lawyers, may be referred. In the past, for example, there has been some mutual lack of understanding of what lawyers and social workers could offer each other. With the team from the Laboratory of Community Psychiatry serving as a catalyst, joint meetings have now been held between CASLS and the medical and mental health care-giving agencies in the Cambridge-Somerville area.

It should never be assumed, however, that merely referring a client to an appropriate agency completes a lawyer's obligation toward the client's problem. Attorneys must follow up, and perhaps work rather closely for a time, with the other professionals to whom the client has been referred.

One critical and delicate matter not yet well explored will be learning how to "turn over" to a social worker, psychiatrist or other professional, a client who comes to the Bureau primarily to see a lawyer. To force unwanted social services upon a client, to treat him not as a client but as a patient, often produces unfortunate regressive effects. The dividing line between being "counsel to the situation" and being harmfully paternalistic is unclear. There is a great need for student lawyers and the professionals cooperating with the Bureau to focus upon the problem of the "turn over" together.

Relationships of Lawyers with Each Other

An unexpectedly new dimension which the consultants have brought to the Legal Aid Bureau and CASLS is an awareness of how professionals, working together in the same office, interact with each other. One problem, which Dr. David Spiegel, and Ms. Naparstek, consultants from Cambridge Hospital have noticed is that law students and attorneys are sometimes reluctant to express doubts they may have about their complete ability to handle a particular legal issue and are somewhat timid about asking questions for fear of exposure. He has noticed a similar protective reaction among medical students who, during their clinical years (or even later, during an internship or residency) are often afraid to double-check a doubtful diagnosis with a fellow, especially senior, doctor. This contributes to tension, as well as sometimes less than the best client or patient service, at the law office or clinic. Dr. Spiegel and Ms. Naparstek have had several full and frank discussions about this at CASLS staff

meetings and have been met with considerable receptiveness.

In discussions with their supervisor, Drs. Kraines, Epley, and Siskind have also explored how they relate together as a team of consultants. Lawyers could profitably emulate their psychiatric colleagues in the concern with, and awareness of, internal organizational behavior.

Systematic Reflection

While the central thrust of the Family Law Project this year has been case consultation, there have been attempts at more systematic reflection. The Laboratory of Community Psychiatry has sponsored a workshop on new approaches towards helping recently separated spouses, which many CASLS and Legal Aid attorneys attended, along with psychiatrists, social workers, and clergy engaged in family counseling. One of the features of the workshop was a description of an evening series of group discussions of the legal and emotional problems of separation and divorce, presented by the Family Service Office of Middlesex Probate Court. These discussion groups, based on a model designed by Professor Robert Weiss, associate dean of the Faculty of Medicine for health care programs, focus on such issues as dealing with feelings of loss, grief, abandonment, guilt, and severe loneliness; the continuing relationship with the ex-spouse; the impact of separation on children, kin, and friends; the effect of divorce on work; dating and coping with fears of failure in remarriage. The Legal Aid Bureau has also sponsored special sessions on ambivalence in separation and divorce, as they manifest themselves to the lawyer, and on alcoholism.

Legal Grand Rounds

It is becoming evident that some of the techniques long used in medical education may be profitably adopted to legal education. The interdisciplinary case conference, modeled after the social service rounds which I have observed at the Cambridge Hospital, is one

example of this. "Grand rounds" is another.

It would seem that law schools and legal services agencies could well adopt, as a teaching device, a modified version of "grand rounds." A number of non-strictly-legal problems which cut across a legal service agency's caseload could be identified and subjected to "grand rounds" exploration.

Perhaps, also a small packet of related reading could be distributed to the lawyers and legal para-professionals who attend.

At each session, an ongoing case would be the focus of discussion. The client to be certain, will not be "wheeled in." But the law-student or attorney who has the case will present it to the assembled audience, who will comment upon it, attempt to help him with a diagnosis, and suggest a course of action.

Hopefully, also, at each session, an invited specialist would be in attendance, who could contribute to the discussion and share his observations, both on the presentation by the lawyer and on the comments by the larger group. This expert would usually be a professor of medicine, social work, psychiatry, law, social relations, or urban planning resident in the area, but need not inevitably be such. The legal services office might wish, for example, to hear from a panel of its clients in order to determine how the community views its operations or new interdisciplinary method of practicing family law.

Not all of the cases presented should necessarily originate at the legal services office. Other professionals should be asked to present some of the cases which come to them in the first instance, but which have legal overtones.

Legal "grand rounds" would seem to serve four principal functions. First, to provide an unusually expert diagnosis for the client concerned. Second, to enable a much larger group than those who usually attend the legal service



office's weekly case conferences to learn about important non-strictly-legal dimensions of legal cases. Third, to exchange information about the legal, medical, and social services available in the area and to develop beneficial inter-professional relationships. Fourth, to provide a starting basis for a joint approach to common problems by law and medical schools.

New Directions for Cooperation

As contacts between legal and health care personnel increase, new directions for cooperation become evident. Already, for example, law students and attorneys at the Legal Aid Bureau and CASLS, are coming to know specific people at specific agencies or the Cambridge Hospital to whom they can turn with complex, non-legal client problems. Likewise, medical and psychiatric personnel are learning about the Family Law Project through presentations at hospital colloquia and community health care meetings. Groups ranging from the Neighborhood Family

Care Center in Cambridge to the psychiatric social work interns at the Massachusetts General Hospital have asked to hear about this new approach to legal services. Some law students have attended community medical and psychiatric rounds at the Cambridge Hospital.

The work of two groups closely affiliated with the Medical School is unusually worthy of further exploration by lawyers. The first of these is the Family Health Care Program at the Medical School and Children's Hospital. It has been examining how physicians, social workers, nurses and others may better meet the total health needs of families who come, initially, to a neighborhood "family doctor." Third-year medical students in the program are assigned a small number of families, all of whose members they will follow for two years. The hope is that these prospective doctors will develop human skills which will make them more helpful to their patients and perceive how illness affects, and, in certain cases, may

be caused by, a family system. An HMS seminar, connected with the program, explores such topics as the initial contact of the physician and the family, the possible relation of a patient's occupation to his illness, the detection of emotional problems, and the like.

In the belief that lawyers — particularly those in neighborhood legal assistance offices — confront many of the same problems and need many of the same skills as "family doctors," Professor Gary Bellow and I visited one of the seminar sessions in March, 1973. A psychiatrist connected with the program, Dr. Harvey Budner, spoke on "The Most Commonly Prescribed Treatment: The Physician and Health Worker," emphasizing the extraordinary demands which patients' needs for reassurance and short-term therapy place on the general practitioner. He also used a videotaped interview between himself and Dr. David Spiegel — ironically the same Dr. Spiegel who has been serving as a consultant to CASLS, which brought out the anxieties a young doctor (or medical student in his clinical years) experiences with his role as a professional. Professor Bellow and I both believe that law students and medical students could mutually profit from a discussion of "professionalism."

Drs. Budner and Bower have subsequently talked with Larry Koten, the director of CASLS and me about the desirability of neighborhood law offices becoming more familiar with the techniques in which prospective "family doctors" are being trained in order to discover what the patient (or client) is truly asking from the doctor (or lawyer). In this connection, it has been very profitable to read Michael Balint's *The Doctor, His Patient and the Illness* (1957), a work on doctor-patient interaction. The chief difference for the attorney is that the adversary system seems to require him to accept the client's stated needs at more or less face value, rather than probe into the underlying causes of why the client has come in to see him on a particular occasion.

A critical area in which lawyers and law students have not heretofore had much training is interviewing techniques. Not only do legal services attorneys feel at a loss to deal with non-strictly-legal problems which may be severely troubling their clients, they do not sufficiently know how to structure an interview to encourage these problems to be expressed. For example, the attorney facing a client who states at the outset that he or she wishes a divorce may bring into the forefront of his mind a check-list of the elements necessary to make out a course of action for divorce, and limit the subsequent course of his interview accordingly. If conducted by a psychiatrist, however, the interview would be much more open-ended and non-directive, allowing the client's difficulties to emerge more fully. How to strike a balance between these two approaches is something which the Family Law Project hopes to understand better.

Dr. Alan Stone's law school course, Human Relations in Legal Practice, focuses on interviewing to some degree, and Professor Bellow's, The Lawyering Process, has analyzed videotaped interviews between a student-attorney and client at the Legal Aid Bureau. Interestingly, however, the Family Health Care Program is simultaneously engaged in analyzing physician-patient interaction through the use of videotapes. These videotapes have been made under conditions of considerable confidentiality and it would not be appropriate, at this point, for them to be shown to a law school (or even a medical school) class. However, if appropriate client or patient consent were forthcoming, perhaps lawyers and doctors could profitably share these videotapes. It is now becoming clear that skillful interviewing is essential if a client's or patient's true needs are to be discovered and that much client or patient satisfaction depends on the manner and setting in which he is treated. Lawyers and law students, at least, could learn a lot from a sophisticated exchange with their colleagues in the medical profession in this regard.

The second group which legal services lawyers might profit from watching in action is the Trauma X Unit at The Children's Hospital. The Trauma X Unit is an interdisciplinary team, consisting of a pediatrician, psychiatrist, social worker, nurse and lawyer, which attempts to uncover the causes of why parents batter children and to make a recommendation concerning the disposition of such cases. A wide range of information is brought to bear, as the potential danger to the child is weighed against the probable harm to family stability if the child is taken away and placed in a foster home. The process of decision-making and the comprehensiveness of the evidence upon which such decisions are reached may be usefully studied by legal services lawyers who, themselves, often have to deal with families under stresses that sometimes lead to child battering. The director of the Trauma X Unit is Dr. Eli Newberger, instructor in pediatrics, and an unusually sensitive pioneer in public health.

Implications for Medical and Legal Education

In recent years, perhaps inspired by the ideal of the War on Poverty, a "new breed" of student has been entering medical and law schools. Such students are fired with a commitment to practice in the public sector and aware that many skills from many disciplines are necessary in order to deal with the complex problems of the city. They feel that they must learn to "speak the language" of professionals in other fields and coordinate their activities with them.

The Family Law Project is an exploratory step in this direction. Interestingly, the idea for it originated, not with the "new breed" but with a group of seasoned lawyers, judges, law and medical professors, psychiatrists, and social workers from the Boston area who, a few years ago, gathered together one evening each month at Harvard Law School. (The work of this colloquium is discussed in Fogelson, Pearson, and Sander, "Making Better Lawyers: A Report on a

Unique Interdisciplinary Venture," *2 Family Law Quarterly* 322 (1968)). At each meeting, one of the members of the group presented a case from his or her clinical experience which involved individual or community mental health and the law. This was followed by a discussion of the appropriate role to be played by the lawyer, judge, and other specialists. The establishment of such interdisciplinary exchanges on a regular basis would seem to be a valuable, and rather easy to organize, venture in many communities.

In the fall of 1973, Professor Frank Sander, plans to conduct, for credit, a clinical seminar in family law at Harvard Law School. This seminar, will combine extensive field experience, with placement at such agencies as the Massachusetts Division of Child Guardianship and the court clinic at Middlesex County Probate Court, with more theoretical analysis, centering around role conflicts, problems of referral and the like. Difficult pending cases will be presented, following the model of "grand rounds" in medicine.

If faculty members or students at the Medical School feel that they might benefit from participation in this seminar or the Family Law Project, they should get in touch with Professor Sander or myself. Likewise, if any courses or projects at the Medical School might benefit from the participation of lawyers or law students, it would likewise be important to get in touch with us. Hopefully, too, the inter-professional cooperation which the Family Law Project and Professor Sander's clinical seminar embodies may be duplicated at other law schools, with the participation of other medical schools, in many communities. Surely better links should be forged between medical and law schools and schools of social work, which are not as integral a part of many universities as they deserve to be. The need for shared insights, where family problems are concerned, is very great, and the opportunity for creative new modes of teaching to meet this need, seem unlimited.

Alumni Notes

1909

"Retired in 1970 after 60 years of practice," writes **Hugh P. Greeley**. "I'm fed up with most of the young men in residencies and clerkships. They are not the least bit interested in people. Most of them are trying to see how many laboratory tests they can order in view of piling up statistics and writings. A wise old professor at Harvard once said to me, 'There are lies, damn lies and statistics.'"

1915

"I'm trying to ignore the slowdown of age," admits **Kenneth L. Dole**. "I'm keeping in contact with our four healthy children in Palo Alto, Calif.; Anchorage, Alaska; Tucson, Ariz., and Houston, Texas. I spend a few hours a week at Pasadena Emergency Center, do some volunteer work in a craft shop rehabilitating children's toys, and play a little golf now and then."

1919

Robert F. Loeb, professor of medicine emeritus, Columbia University College of Physicians and Surgeons, has been awarded the ACP Distinguished Teacher Award for 1973. This honor is given to a physician who has demonstrated the ennobling qualities of a great teacher.

1920

"Nothing new to report," writes **Lawrence W. Smith**. "Have moved to a retirement community to make life physically easier (no grass to cut, no snow to shovel), and in preparation of planned retirement in 1975 when I reach 80 years. I'm still active in laboratory

diagnostic work and as a hospital consultant."

William J. Van Den Berg writes: "Retired at last after many years of good service thanks to Harvard."

1921

William B. Castle has been selected as a fellow of the American Institute of Nutrition. Dr. Castle will join a select group of fellows comprising the most illustrious names in the science of nutrition. This honor is bestowed each year on not more than three members of long standing who have had distinguished careers in nutrition. Dr. Castle is a long-time professor of medicine at HMS and director of the Thorndike Memorial Laboratories at BCH.

As class historian, **Jean A. Curran** is enjoying the opportunity to work with **William B. Castle** and **Robert W. Buck** on preparing, for the first time, a more comprehensive fifty-year history of the careers of their classmates.

1922

From the Sunshine State, **Howard B. Goodrich** writes: "Still enjoying an active practice of gynecology in Orlando, Florida."

Hamilton Montgomery is still actively participating in weekly dermatopathology conferences, and attends regional and some national meetings. Dr. Montgomery's wife gave informal lectures this summer in Warsaw and they visited former students in Europe as well as their daughter in England. They went on by boat to Norway where their daughter and her family have a summer place near Oslo.

1925

The University of California, Irvine, was fortunate to have **James M. Baty** as visiting professor emeritus of pediatrics for five weeks in January and February. Dr. Baty continues an active pediatric practice in Belmont.

1926

Still working at the V.A. Hospital in North Carolina is **George C. Crump**. Dr. Crump is in the geriatric section and is "enjoying it very much."

1927

Cattle ranches and bull fights are on the agenda for **Jesse L. Carr**, who writes: "All's well in California, but for unseasonably cold weather. We leave for Mexico shortly to visit cattle ranches and to learn how to raise and fight bulls; fighting the bull being a must in our forecasted future as an essential to survival."

1928

Spreading reunion cheer **Roger D. Baker** writes: "I am looking forward to our 45th reunion this June. Reunions can be fun, especially if everybody comes!"

"There's nothing like home," states **Carl J. DePrizio**. "I've traveled in all continents and visited 54 countries, but home is best. I'm still practicing surgery and am senior associate surgeon at Sturdy Memorial Hospital in Attleboro, Mass., and desire a young surgeon to take over my practice anytime."

Retired, but still very active is **Richard W. Dwight**, who tells us what he's up to:

